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INDEX
TO THE
LITERATURE
OF
AMERICAN ECONOMIC
ENTOMOLOGY

January 1, 1905 to December 31, 1914

Compiled by
NATHAN BANKS



AMERICAN ASSOCIATION OF ECONOMIC ENTOMOLOGISTS
MELROSE HIGHLANDS, MASS.

1917

INTRODUCTORY

The great need of bringing the Bibliography of American Economic Entomology down to date was considered at the Cleveland meeting in 1913. A special committee was appointed and drafted resolutions urging the Secretary of Agriculture to continue this exceedingly useful publication. As this proved impracticable, the President appointed a special committee consisting of W. E. Britton, E. P. Felt and J. J. Davis to formulate and submit a plan the following December. This was done; the plan duly accepted and the following were then appointed to have charge of the work: Messrs. E. P. Felt, W. E. Britton, W. E. Hinds, W. C. O'Kane and A. F. Burgess, a committee which continued in charge until the completed index was put into the hands of the Editorial Board of the *Journal of Economic Entomology*. The committee arranged with Dr. L. O. Howard, Chief of the Federal Bureau of Entomology, for the compilation of the Index, submitted progress reports in December 1914 and 1915 and after exhausting every reasonable possibility of securing the publication of the work through a government agency, prepared a third report which was favorably acted upon in December 1916, authorizing its publication by the Journal Board. It is perhaps unnecessary to add that much of the success of the work, projected as it is along new lines, is due to the untiring patience and devotion of the compiler, Dr. Nathan Banks, then connected with the United States Bureau of Entomology.

E. P. FELT,
W. E. BRITTON,
W. E. HINDS,
W. C. O'KANE,
A. F. BURGESS,
Committee.

INDEX TO THE LITERATURE OF AMERICAN ECONOMIC ENTOMOLOGY

JANUARY 1, 1905, TO DECEMBER 31, 1914

By NATHAN BANKS

The following Index to the literature of American Economic Entomology for the ten-year period from January 1, 1905 to December 31, 1914, is a continuation of the Bibliography of Economic Entomology. It has been recognized for some time that an Index on the following plan would contain all that was most useful in the Bibliography and besides would furnish the page references, and be more readily usable and occupy less space than the Bibliography. The insects and other headings are arranged alphabetically; under each are placed the references by author alphabetically. The several articles by one author are arranged chronologically. Unsigned articles are placed after the other references.

The amount of entomological literature has increased enormously in the last ten years, more especially in the agricultural press. Much of this is but a reprint of Station and Federal bulletins; and when plainly so has not been indexed. It is, however, impracticable to examine each article thoroughly to see whether it contains new matter, so doubtless various references may duplicate others, and on the other hand it is probable that some references have been omitted that should have been included. It is also probable that various references have escaped notice of the compiler.

The references (following a recommendation of a committee of the American Association of Economic Entomologists) are rather more abbreviated than usual; but will be readily understood by entomologists, at least with the following explanations:

"B." means bulletin, "C.," circular, "R.," report, "P. B.," press bulletin. Publications of experiment stations are referred to simply by State and number of bulletin, circular or report, as "Fla. B. 42" means Bulletin 42 of the Florida Agricultural Experiment Station. In New York, the Cornell bulletins are referred to as "N. Y. C. B."; the Geneva Station bulletins as "N. Y. St. B." The bulletins of the Bureau of Entomology, United States Department of Agriculture are referred to as "U. S. B."; the yearbook articles as "U. S. Y. B."; the Farmers' Bulletins as "U. S. F. B."; the more recent bulletins of this Department as "U. S. D. A. B."; the Gipsy and Brown-tail Moth Reports are "G. & B.-T. R."

"Pr." is used for Proceedings, "Jr." or "J." for Journal. The words "State" and "Annual" are usually omitted in the references, although in a few cases "St." (State) is retained because of possible confusion. The first figure after the "B." or "R." indicates the number of the bulletin or report and the next figure the page; the year is usually added, for it is oftentimes a help.

The preparation of the Index has been greatly facilitated by the aid of two typewriters, Mrs. Harriet Bishop and particularly by Miss M. G. Champney, whose knowledge of entomology and of the methods of the Bureau has been of especial value during the entire time of preparation.

LIST OF ABBREVIATIONS

The list of abbreviations given below is supplementary to the preceding explanations:

Agr. = Agriculture, Agriculturist	Farm. = Farmer
Agric. = Agriculturist, Agricultural	Fed. = Federal
Am. or Amer. = American	For. = Forestry
Ann. = Annals, Annual	Fr. = Fruit
App. = Appendix	Fum. = Fumigation
Archiv. = Archives	Fung. = Fungicide
Assoc. = Association	G. & B. T. = Gipsy and Brown Tail
B. = Bulletin	Gard. = Gardening, Gardeners
B. C. = British Columbia	Gaz. = Gazette
Bd. = Board	Gen. = General
Bien. = Biennial	Gentl. = Gentleman
Bio. or Biol. = Biological	Geog. = Geographic
Bost. = Boston	Grow. = Grower
Br. = Branch	Hort. = Horticulture, Horticulturist
Bu. or Bur. = Bureau	Hosp. = Hospital
Bull. = Bulletin	Hyg. = Hygiene
C. = Circular	Infect. = Infectious
C. when after N. Y. = Cornell	Inform. = Information
C. Gentl. = Country Gentleman	Inj. = Injurious
Calif. = California	Ins. = Insects, Insecticide
Can. = Canada	Insect. = Insecticide
Clem. = Clemson	Insp. = Inspection
Col. = Colmans	Intern. = International
Coll. = College	Interst. = Interstate
Comm. = Commission	J., Jr. or Jour. = Journal
Confer. = Conference	L. I. = Long Island
Cong. = Congress	Lab. = Laboratory
Contr. = Contribution	Lumberm. = Lumberman
Conv. = Convention	Mag. = Magazine
Cran. or Cranb. = Cranberry	Man. = Manual
Cult. = Cultivator	Med. = Medicine
Cut. or Cutan. = Cutaneous	Meet. = Meeting
D. A. = Department Agriculture	Mem. = Memoir
Dept. = Department	Milit. = Military
Dermat. = Dermatology	Mill. = Miller
Destr. = Destructive	Mod. = Modern
Dis. = Diseases	Month. = Monthly
Dom. = Dominion	Mort. = Mortality
Ec. = Economic	Mosq. = Mosquito
Econ. = Economics	Mus. = Museum
Educ. = Education	N. Eng. = New England
Eng. = Engineering	N. Orl. = New Orleans
Ent. = Entomology, Entomologist	Nat. = Naturalist
Exch. = Exchange	Nat'l = National
Exp. = Experimental	Northw. = Northwestern
Exterm. = Extermination	Not. = Notices

- Nurs. = Nursery
 O. = Ohio
 Off. = Office
 Ont. = Ontario
 Or. = Orange
 Orch. = Orchard
 Ott. = Ottawa
 P. B. = Press Bulletin
 Pac. = Pacific
 Path. = Pathological
 Plant. = Planter
 Poly. = Polytechnic
 Pom. = Pomological
 Pom. with Ent. = Pomona
 Pop. = Popular
 Prai. = Prairie
 Prevent. = Preventive
 Prod. = Producers
 Prog. = Progressive
 Pub. = Public
 Public. = Publication
 Quar. or Quart. = Quarterly
 R. = Report
 Rec. = Record
 Rev. = Review
 Roy. = Royal
 Rur. = Rural
 S. = South
 Sci. = Science
 Sec'y. = Secretary
 Serv. = Service
 Sess. = Session
 Soc. = Society
 South. = Southern
 Sp. = Special
 St. = State
 Sta. = Station
 Statis. = Statistical
 Stockm. = Stockman
 Suppl. = Supplement
 Suppr. = Suppression
 Supt. = Superintendent
 Surg. = Surgeon
 S. W. = Southwestern
 Syn. = Synopsis
 Techn. = Technical
 Tr. or Trans. = Transactions
 Trop. = Tropical
 Univ. = University
 U. S. B. = Bulletin U. S. Bureau Entomology
 U. S. C. = Circular U. S. Bureau Entomology
 U. S. D. A. B. = Bulletin U. S. Dept. Agriculture
 U. S. F. B. = U. S. Dept. Agric. Farmers Bulletin
 U. S. B. An. I. = U. S. Bureau Animal Industry
 U. S. Y. B. = Yearbook U. S. Dept. Agriculture
 Veg. = Vegetation
 Vet. or Veter. = Veterinary
 West. = Western
 Zoöl. = Zoölogy

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- Adalia melanopleura**
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 ——— S. D. Hort. Soc. 6th R. 229, '09.
 ——— U. S. Y. B., 1905, 631.
 ——— U. S. Y. B., 1906, 509.
 ——— U. S. Y. B., 1907, 542.
 ——— U. S. Y. B., 1908, 567.

Alaptus eriococchi

Quayle, Cal. B. 222, 138, 1911.

Alaus oculatus

Felt, N. Y. R. 20, 409, 1905.

Felt, N. Y. St. Mus. Mem. 8, 485, 1906.

Tucker, Kans. Farm., Apr. 5, 1906, 379.

Alcathoe caudata

Patch, Me. B. 162, 358, 1908.

Alder flea-beetle, see Haltica bimarginata

Aletia argillacea, see Alabama

Aleyrodes

Slingerland & Crosby, N. Y. C. B. 252, 346, 1908.

Slingerland, Herrick & Crosby, N. Y. C. B. 283, 472, 1910.

Aleyrodes citri

Back, Fla. Fr. Prod. News, Apr. 15, 1910, 1.

Barre & Conradi, S. C. B. 141, 41, 1909.

Berger, Fla. Dept. Agr. Quar. B. 2, vol. 24, 25, 1904.

Berger, Fla. R. 1906, xviii.

Berger, Fla. B. 88, 53, 1907.

Berger, Fla. R., 1907, xxx.

Berger, Fla. R., 1908, xlviii.

Berger, J. Ec. Ent. I, 324, 1908.

Berger, Fla. R. 1909, xxxvi.

Berger, Fla. Fr. Prod. News, Feb. 26, 1909, 13.

Berger, Fla. Fr. Prod. News, May 1, 1909, 5.

Berger, Fla. B. 103, 22, 1910.

Berger, Fla. Fr. Prod. News, Jan. 21, 1910, 1.

Berger, Fla. Fr. Prod. News, Feb. 25, 1910, 10.

Berger, Fla. Fr. Prod. News, Apr. 22, 1910, 1.

Berger, Fla. Fr. Grow., Oct. 7, 1910, 2.

Berger, Fla. Fr. Prod. News, Nov. 11, 1910, 9.

Berger, Fla. Hort. Soc. Trans. f.; 1910, 80.

Berger, Fla. Fr. Grow., Feb. 3, 1911, 3.

Berger, Fla. Fr. Grow., Apr. 7, 1911, 3.

Berger, Fla. Fr. Grow., July, 27, '11, 11.

Berger, Fla. R. 1911, xlv.

Berger, Fla. Fr. Grow., June 29, '12, 5.

Berger, Fla. Dept. Agr. Quar. B. 2, vol. 22, 83, 1912.

Clarke, Rur. Calif., Aug. 1907, 293.

Clarke, Rur. Calif., Sept. 1907, 329.

Coit, Ariz. B. 58, 322, 1908.

Conner, Fla. Hort. Soc. Trans. f., '05, 49.

Cook, Cal. Hort. Comm. Bien. R. 5, 11, 1912.

Cooper, Cal. Hort. Comm. C. Nov. 1905, 13.

Cooper, Cal. Fr. Grow., Oct. 12, '07, 8.

Cooper, Pac. Rur. Press, LXXIV, 11, 1907.

Ehrhorn, Pac. Rur. Press, LXXVI, 388, 1908.

Essig, Cal. Hort. B. II, 1-2, 143, 1913.

Gahan, Md. B. 119, 19, 1907.

Hardy, Fla. Hort. Soc. Trans. f., '10, 88.

Howard, U. S. R. Ent., 1907, 28.

Howard, U. S. R. Ent., 1908, 26.

Howard, U. S. R. Ent., 1909, 31.

Howard, U. S. R. Ent., 1910, 30.

Howard, U. S. R. Ent., 1911, 30.

Howard, U. S. R. Ent., 1912, 11, 33.

Hume, Tr. Fla. Hort. Soc., 1909, 93.

Jeffrey, Cal. Cult., XXX, 500, 1908.

Jeffrey, Cal. Fr. Grow., Jan. 4, 1908, 9.

Jeffrey, Cal. Hort. Comm. Bien. R. 3, 15, 1909.

Kilgore, Fla. Hort. Soc. Trans. f., 1910, 90.

Kone, Tex. Comm. Agr. R. 3, 7, 1910.

Marlatt, Cal. Cult., XXX, 108, 1908.

Marlatt, Pr. Ent. Soc. Wash. IX, 121, 1908.

Merrill, Cal. Hort. B. I. 1, 14, 1911.

Merrill, Cal. Hort. B. I, 6, 242, 1912.

Morrill, U. S. C. 57, 4, 1905.

Morrill, Fla. Fr. Prod. News, Nov. 20, 1908, 3.

Morrill, 21st Meet. Fla. Hort. Soc., '08.

Morrill, U. S. B. 76, 7, 1908.

Morrill, Fla. Fr. Prod. News, Jan. 7, 1910, 1, 2, 3, 10, 11.

Morrill, Fla. Fr. Prod. News, May 13, 1910, 3.

Morrill, Cal. Cult. XXXV, 316, 1910.

Morrill, J. Ec. Ent. IV, 363, 1911.

Morrill & Back, U. S. B. 92, 11, 1911.

Morrill & Back, U. S. B. 102, 7, 1912.

Morrill & Yothers, U. S. C. 111, 1909.

Morrill & Yothers, Fla. Fr. Prod. News, Dec. 16, 1910, 3.

Newell & Rosenfeld, La. Crop Pest Comm., C. 12, 7, 1907.

Aleyrodes citri (*Cont'd*)

- Quaintance, Pr. Ent. Soc. Wash. VIII, 107, 1907.
 Quayle, Cal. B. 214, 504, 1911.
 Roberts, Fla. Fr. Prod. News, Aug. 19, 1910, 2.
 Rolfs, Fla. Fr. Prod. News, Nov. 12, 1909, 14-15.
 Rolfs, Fla. Fr. Prod. News, Apr. 29, 1910, 1.
 Rose, Fla. Dept. Agr. B. 1, vol. 15, 48, 1905.
 Rose, Fla. Dept. Agr. B. 1, vol. 17, 50, 1907.
 Rose, Fla. Dept. Agr. Quar. B. 1, vol. 18, 53, 1908.
 Rose, Fla. Dept. Agr. Quar. B. 1, vol. 19, 43, 1909.
 Rosenfeld, La. Crop Pest Comm. C. 18, 5, 1907.
 Rosenfeld, La. Hort. Soc., 1907, 30.
 Rosenfeld, La. Hort. Soc., 1908, 116.
 Rosenfeld, J. Ec. Ent. III, 215, 1910.
 Scholl, Tex. Stockm., Farm., Sept. 22, 1909, 2.
 Sellards, Fla. R., 1905, 26.
 Stevens, Fla. Hort. Soc. Trans. f., 1913, 100.
 Watson, Fla. R., 1912, li.
 Watson, Fla. R., 1912, liv.
 Watson, Fla. B. 123, 1914.
 Williams, Ala. Poly. Ins. B. 157, 659, '11.
 Winfield, Fla. Fr. Prod. News, May 14, 1909, 7.
 Woglum, U. S. B. 90, 28, 1912.
 Woglum, U. S. B. 120, 9, 1913.
 Woodworth, Cal. C. 23, 1907.
 Woodworth, Cal. C. 30, 1907.
 Woodworth, Cal. Fr. Grow., June 15, 1907, 1.
 Woodworth Pac. Rur. Press, LXXIII, 401, 1907.
 Worsham, J. Ec. Ent. II, 207, 1909.
 Yothers, Cal. Fr. Grow., Sept. 12, 1908, 11.
 Yothers, Fla. Fr. Prod. News, Mar. 25, 1910, 7.
 Yothers, Fla. Hort. Soc., 1912, 53.
 Yothers, Fla. Grow., June 14, 1913, 3.
 Yothers, U. S. C. 168, 1, 1913.
 ——— Cal. Cult., XXVIII, 637, 1907.
 ——— Cal. Fr. Grow., June 1, 1907, 6.
 ——— Cal. Fr. Grow., Aug. 24, 1907, 9.
 ——— Cal. Hort. Comm. Bien. R. 6, 12, 1914.
 ——— S. W. Stockm., Mar. 5, 1909, 7.
 ——— U. S. Y. B., 1906, 513.
 ——— U. S. Y. B., 1907, 548.
 ——— U. S. Y. B., 1908, 577.
Aleyrodes citri and Manatee snail
 Waite, Fla. Hort. Soc. Trans. f., '06, 31.
Aleyrodes citri and snails
 Morrill & Back, U. S. B. 102, 9, 1912.
Aleyrodes citri, Diseases of
 Berger, Fla. R., 1910, xxxv.
 Berger, Fla. R., 1911, xl.
 Fawcett, Fla. Fr. Prod. News, Dec. 30, 1910, 3.
 Morrill & Back, U. S. B. 102, 20, 1912.
 Rolfs & Fawcett, Fla. B. 94, 1908.
 Rolfs & Fawcett, Fla. B. 119, 71, 1913.
Aleyrodes citri, legislation
 ——— Fla. Hort. Soc. Trans. f., '05, 130.
Aleyrodes citri, Parasites of
 Howard, Fla. Fr. Grow., Dec. 16, '11, 10.
 Howard, J. Ec. Ent. IV, 130, 1911.
 Woglum, Fla. Fr. Grow., June 1, '12, 3.
 Woglum, Fla. Fr. Grow., June 8, '12, 3.
Aleyrodes citri, Quarantine.
 Berger, Fla. B. 103, 23, 1910.
 Cook, Cal. Cult. XXXIX, 324, 1912.
 Cook, Cal. Hort. B. I, 11, 882, 1912.
 Cook, Cal. Hort. Comm. Statutes, '12, 23.
 Cook, Pac. Rur. Press, LXXXV, 172, 1913.
 Cooper, Cal. Fr. Grow., Oct. 21, '05, 13.
 Cooper, Cal. Hort. Comm. Mon. C. Mar. 1906.
 Cooper, Cal. Hort. Comm. Bien. R. 2, 16, 1907.
 Day, Cal. Cult., XXV, 391, 1905.
 Jeffrey, Cal. Hort. Comm. C. Nov. '05, 4.
 ——— Cal. Hort. B. I, 12, 925, 1912.
Aleyrodes cocois
 Watson, Fla. R. 1912, lx.
Aleyrodes forbesii
 Jarvis, Ont. Ent. Soc. R. 41, 79, 1911.
Aleyrodes howardi
 Back, J. Ec. Ent. II, 448, 1909.
 Back, U. S. B. 64, 65, 1910.
 Berger, Fla. B. 103, 22, 1910.
 Berger, Fla. R. 1911, lvi.
 Howard, U. S. R. Ent., 1911, 32.

- Marlatt, J. Ec. Ent. V, 77, 1912.
 Morrill & Back, U. S. B. 92, 11, 1911.
 Watson, Fla. R., 1912, liv.
 Watson, Fla. Grow., June 7, 1913, 5.
 Watson, Fla. Grow., Dec. 6, 1913, 22.
 Watson, Fla. B. 123, 21, 1914.
- Aleyrodes nubifera**
 Berger, Fla. R., 1909, xxxv.
 Berger, Fla. B. 103, 22, 1910.
 Berger, Fla. R., 1911, xlv.
 Merrill, Cal. Hort. B. I, 2, 63, 1912.
 Morrill, Fla. Fr. Prod. News, June, 18, 1909, 6.
 Morrill & Back, U. S. B. 92, 86, 1911.
 Morrill & Back, U. S. B. 102, 17, '12.
 Watson, Fla. B. 123, 20, 1914.
 Yothers, Fla. Grow. June 14, 1913, 3.
 Yothers, U. S. C. 168, 2, 1913.
 ——— U. S. Y. B., 1908, 577.
- Aleyrodes packardi**
 Howard, U. S. R. Ent., 1911, 29.
 Morrill, U. S. C. 57, 4, 1905.
 Slingerland & Crosby, Man. Fr. Ins. 369, 1914.
 Smith, N. J. B. 225, 30, 1909.
- Aleyrodes sp.**
 Fernald, Mass. R. 17, 113, 1905.
 Newell, Farm & Ranch, May 13, '05, 11.
 Watson, Fla. Grow. Nov. 22, '13, 15.
- Aleyrodes tabaci**
 Watson, Fla. B. 112, 38, 1912.
- Aleyrodes vaporariorum**
 Britton, Conn. R. 6, 275, 1907.
 Britton, Conn. R. 8, 815, 1909.
 Broderick, Farm. Advocate, 1914, 1506.
 Chittenden, Ins. Inj. Veg. 175, 1907.
 Cooley, Mont. B. 92, 56, 1912.
 Davis, J. Ec. Ent. III, 181, 1910.
 Davis, Ill. Ent. R. 26, 121, 1911.
 Davis, Ill. Hort. Soc. f., 1910, 34, 1911.
 Davis, Ill. Ent. R. 27, 130, 1912.
 Essig, Cal. Hort. B. II, 1-2, 144, 1913.
 Felt, C. Gentl., 1910, 1198.
 Fernald, Mass. Crop R. f., Oct. 1907, 30.
 Fernald, Mass. Bd. Agr. R. 55, 385, '08.
 Gossard, J. Ec. Ent. I, 188, 1908.
 Hood, Mass. C. 19, 1908.
 Howard, U. S. R. Ent., 1905, 289.
 Hunt, Can. Hort. XXXI, 53, 1908.
 Hutt, Ont. Agr. Coll. R. 33, 150, 1908.
 Jarvis, Ont. Ent. Soc. R. 37, 45, 1907.
 Jarvis, Ont. Ent. Soc. R. 41, 78, 1911.
- McMeans, Can. Hort. XXXI, 130, '08.
 Morrill, U. S. C. 57, 1, 1905.
 O'Kane, Inj. Ins. 205, 1914.
 Shaw, Ohio Bd. Agr. R. 63, 698, 1908.
 ——— Rur. N. Y., 1905, 36.
 ——— U. S. Y. B., 1907, 551.
 ——— U. S. Y. B., 1908, 578.
- Aleyrodicus asarumis**
 Jarvis, Ont. Ent. Soc. R. 41, 78, 1911.
- Aleurodidae, economic**
 Quaintance, Tech. B. 12, pt. 5, U. S. Bur. Ent., 1907.
- Aleurodthrips fasciapennis**
 Morrill & Back, U. S. B. 102, 9, 1912.
- Alfalfa caterpillar, see Eurymus eurytheme**
- Alfalfa crane fly, see Tipula simplex**
- Alfalfa insects**
 Clay, Tex. Agr. & Statis. R., 1905, 262.
 Dean, Kans. Agric. Educ. I, 4, 67, 1909.
 Headlee, Kans. B. 155, 332, 1908.
 Morrill, S. W. Stockm., June 2, 1911, 1.
 Morrill, S. W. Stockm., Jan. 23, '14, 10.
 Titus, Utah Farm., Aug. 3, 1912, 938.
- Alfalfa webworm, see Loxostege commixtalis**
- Alfalfa weevil, see Phytonomus murinus**
- Allegheny spruce beetle, see Dendroctonus punctatus**
- Allocota thyridopterigis**
 Haseman, Mo. B. 104, 324, 1912.
 Howard & Chittenden, U. S. C. 97, 6, 1908.
- Allograpta fracta**
 Russell, U. S. D. A. B. 90, 10, 1914.
- Allograpta obliqua**
 Davidson, U. S. D. A. B. 100, 37, 1914.
 Essig, Pom. Jr. Ent. III, 613, 1911.
 Essig, Cal. Hort. B. II, 1-2, 248, 1913.
 Folsom, Ill. B. 134, 147, 1909.
 Herrick, J. Ec. Ent. IV, 222, 1911.
 Herrick & Hungate, N. Y. C. B. 300, 737, 1911.
 Swenk, Nebr. R. 24, 41, 1911.
- Allorhina mutabilis**
 Forbes, Ill. Ent. R. 23, 101, 1905.
 Garcia, N. Mex. B. 58, 27, 1906.
 Hunter, Pratt & Mitchell, U. S. B. 113, 35, 1912.
 Morrill, J. Ec. Ent. VI, 193, 1913.
 ——— U. S. Y. B., 1907, 548.
- Allorhina nitida**
 Felt, N. Y. R. 23, 42, 1908.

Allorhina nitida (*Cont'd*)

- Forbes, Ill. Ent. R. 23, 101, 1905.
 Garman, Ky. B. 145, 295, 1909.
 O'Kane, Inj. Ins. 324, 1914.
 Slingerland & Crosby, Man. Fr. Ins.
 296, 1914.
 Smith, N. J. R., 1911, 444.
 Smith & Lewis, U. S. B. 60, 78, 1906.
 Symons, Md. B. 101, 148, 1905.
 ——— S. W. Stockm., Feb. 20, '14, 10.
 ——— U. S. Y. B., 1905, 633.
 ——— U. S. Y. B., 1907, 546.

Allorhina nitida, *Disease of*

Northrup, Mich. Tech. B. 18, 512, 1914.

Allotria sp. on green bug

Webster & Phillips, U. S. B. 110, 128,
 1912.

Allotria xanthopsis, *see Charips***Alsophila pometaria**

- Alderman, Giddings & Rumsey, W.
 Va. C. 7, 28, 1913.
 Bailey, Vt. Agr. Ann. 6, 38, 1914.
 Baldwin, Ind. Ent. R. 5, 61, 1912.
 Bethune, Ont. Agr. Coll. B. 158, 9, '07.
 Bremner, Cal. Hort. Comm. Destr. Ins.
 8, 1910.
 Britton, J. Ec. Ent. I, 313, 1908.
 Britton, Conn. R. 8, 783, 1909.
 Britton, J. Ec. Ent. III, 435, 1910.
 Buckley, Me. Dept. Agr. B., vol. X, 3,
 2, 1911.
 Caesar, Ont. Ent. Soc. R. 43, 77, 1913.
 Caesar, Ont. Ent. Soc. R. 44, 50, 1914.
 Clinton & Britton, Conn. R. f., 1909–
 1910, 594, 1911.
 Cooley, Mont. B. 98, 126, 1914.
 Cooper, Cal. Hort. Comm. Ins. & In-
 sect., 12, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1,
 116, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2,
 225, 1907.
 Essig, Cal. Hort. B. II, 1–2, 186, 1913.
 Felt, C. Gentl., 1908, 608.
 Felt, N. Y. R. 24, 45, 1909.
 Fernald, Mass. B., 125, 54, 1908.
 Fulton, Wright & Gregg, Pa. B. 110, 13,
 1911.
 Garcia, N. Mex. B. 68, 40, 1908.
 Gossard, Ohio B. 164, 14, 1905.
 Gossard, Ohio B. 198, 40, 1908.
 Gossard, Ohio B. 233, 107, 1911.

- Hall, C. Gentl., Oct. 31, 1914, 1796.
 Haseman, Mo. Hort. Soc., 1911, 236.
 Johannsen & Patch, Me. Comm. Agr.
 R. f., 1910, 340.
 Lamson, Conn. Storrs, B. 71, 72, 1912.
 Lochhead, Ont. Agr. Coll. B. 144, 30, '05.
 Lochhead, Syn. Ec. Ent. 59, 1914.
 Moore, Wis. B. 190, 16, 1910.
 Moulton, Pac. Rur. Press, LXXVIII,
 261, 1909.
 O'Kane, Inj. Ins. 281, 1914.
 Quaintance, Mich. Hort. Soc., 1905–
 1906, 129, 1907.
 Quaintance, U. S. B. 68, 17, 1907.
 Quaintance & Scott, U. S. F. B. 492, 17,
 1912.
 Rumsey, W. Va., R. f., 1904–1905, 13.
 Rumsey & Brooks, W. Va. R. f., 1907–
 1908, 19.
 Rumsey & Brooks, W. Va. B. 116, 237,
 1908.
 Sanderson, Ins. Pests, 572, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 86,
 1914.
 Smith, N. C. B. 206, 71, 1910.
 Stene, R. I. Bd. Agr. R. 21, 64, 1906.
 Stene, R. I. Nurs. Insp. 1906, 48.
 Stene, R. I. Bd. Agr. R. 25, 148, 1910.
 Surface, Pa. D. A. Zoöl. I, 4, 155, 1911.
 Troop, Ind. Bd. Agr. R. 55, 476, 1907.
 ——— U. S. Y. B., 1905, 632.
 ——— U. S. Y. B., 1906, 512.
 ——— U. S. Y. B., 1907, 547.
 ——— U. S. Y. B., 1908, 575.

Alydnus eurus

Felt, N. Y. St. Mus. Mem. 8, 613, 1906.

Alypia octomaculata

- Felt, N. Y. St. Mus. Mem. 8, 575, 1906.
 Gillette, Colo. B. 114, 22, 1906.
 Gillette, Better Fr., Feb. 1910, 22.
 Gossard, Ohio B. 233, 140, 1911.
 Johnson, Farm Guide, May 27, '11, 6.
 Miller, Ind. Farm, July 1, 1905, 1.
 O'Kane, Inj. Ins. 275, 1914.
 Slingerland & Crosby, Man. Fr. Ins.
 420, 1914.
 ——— U. S. Y. B., 1905, 633.

Amara avida

- Smith, N. J. B. 225, 36, 1909.
 Smith, J. Ec. Ent. III, 97, 1910.

Amara exarata

- Smith, N. J. R., 1909, 405.

- Amara impuncticollis**
Washburn, U. S. B. 67, 15, 1907.
- Amara obesa**
Patch, Me. B. 162, 366, 1908.
- Amara sp.**
Pac. Rur. Press, LXXXVIII, 99, 1914.
- Amauronematus luteotergum**
Felt, N. Y. St. Mus. Mem. 8, 572, 1906.
- Amblyomma americanum**
Cary, Ala. Poly. B. 141, 145, 1907.
Hooker, Bishopp, & Wood, U. S. B. 106, 142, 1912.
Hunter & Bishopp, U. S. Y. B., 1910, 223.
Hunter & Hooker, U. S. B. 72, 59, 1907.
Mohler, U. S. B. An. Ind. B. 78, '05, 15.
Mohler, U. S. F. B. 258, 16, 1906.
Mohler, U. S. F. B. 569, 10, 1914.
——— U. S. Y. B., 1906, 516.
——— U. S. Y. B., 1908, 580.
- Amblyomma cajennense**
Hooker, Bishopp & Wood, U. S. B. 106, 151, 1912.
Hunter & Hooker, U. S. B. 72, 60, 1907.
——— U. S. Y. B., 1906, 516.
- Amblyomma dissimile**
Hooker, Bishopp & Wood, U. S. B. 106, 130, 1912.
- Amblyomma maculatum**
Hunter & Bishopp, U. S. Y. B., '10, 224.
Hunter & Hooker, U. S. B. 72, 62, 1907.
——— U. S. Y. B., 1906, 516.
——— U. S. Y. B., 1908, 580.
- Amblyomma tuberculatum**
Hooker, Bishopp & Wood, U. S. B. 106, 123, 1912.
Hunter & Hooker, U. S. B. 72, 64, 1907.
- Amblyteles montanus**
Johannsen & Patch, Me. B. 195, 242, '11.
- Amblyteles subrufus**
Johnson, Colo. B. 98, 21, 1905.
- Ambrosia beetles**
Felt, N. Y. St. Mus. 8, 394, 1906.
Hopkins, U. S. B. 58, 1909.
——— U. S. Y. B., 1905, 632.
- Ameloctonus sp.**
Hyslop, U. S. B. 95, 116, 1912.
- Amempheres sp. on pickle worm**
Smith, N. C. B. 214, 141, 1911.
- American cockroach, see Periplaneta americana**
- American copper, see Heodes hypophlaeas**
- American dagger-moth, see Apatela americana**
- American disinfectant**
Britton, Conn. R. 5, 261, 1906.
- American frit-fly, see Oscinis soror and O. variabilis**
- American gadfly, see Tabanus americanus**
- American locust, see Schistocerca americana**
- American tent-caterpillar, see Malacosoma americana**
- American walnut aphid, see Callipterus caryae**
- Amicroplus sp.**
Herrick, N. Y. C. B. 311, 286, 1912.
- Ammonia gas as fumigant**
Fink, J. Ec. Ent. VII, 149, 1914.
- Ammophila luctuosa**
Gibson, Can. Exp. Farms Ent. B. 3, 12, 1912.
- Ammophila pictipennis**
Garman, Ky. B. 137, 437, 1908.
- Amorphota sp. on beet webworm**
Chittenden, U. S. B. 109, 21, 1911.
- Ampelogypter ater**
Brooks, W. Va. B. 119, 330, 1909.
O'Kane, Inj. Ins. 247, 1914.
Rumsey, W. Va. R. f., 1909-1910, 70.
Sanderson, Ins. Pests, 511, 1912.
Slingerland & Crosby, Man. Fr. Ins. 426, 1914.
- Ampelogypter sesostris**
Baldwin, Ind. Ent. R. 5, 116, 1912.
Brooks, W. Va. B. 119, 322, 1909.
Brooks, W. Va. R. f., 1909-1910, 64.
Gossard, Ohio B. 233, 137, 1911.
O'Kane, Inj. Ins. 246, 272, 1914.
Pierce, U. S. B. 73, 47, 1908.
Pierce, U. S. B. 100, 80, 1912.
Sanderson, Ins. Pests, 509, 1912.
Slingerland & Crosby, Man. Fr. Ins. 425, 1914.
- Ampelophaga myron**
Gossard, Ohio B. 233, 137, 1911.
Sanderson, Ins. Pests, 528, 1912.
- Amphibolips confluentus**
Felt, N. Y. St. Mus. Mem. 8, 625, 1906.
- Amphibolips ilicifoliae**
Felt, N. Y. St. Mus. Mem. 8, 625, 1906.
- Amphibolips inanis**
Felt, N. Y. St. Mus. Mem. 8, 625, 1906.

Amphibolips prunus

Felt, N. Y. St. Mus. Mem. 8, 628, 1906.

Amphicerus bicaudatus

Adams, Ark. B. 92, 6, 1907.

Baldwin, Ind. Ent. R. 5, 116, 1912.

Chittenden, Nut Grow., May 1905, 147.

Chittenden, Nut Grow., Mar. 1906, 137.

Dean & Peairs, Kans. Agr. Educ. VI, 2, 36, 94, 1913.

Douglass, Ind. Ent. R. 3, 200, 1910.

Fernald, Mass. R. 25, II, 85, 1913.

Garcia, N. Mex. B. 68, 47, 1908.

Garcia, N. Mex. B. 75, 37, 1910.

Gillette, Better Fr., Feb. 1910, 17.

Gossard, Ohio B. 264, 67, 1913.

Gossard, Ohio C. 140, 12, 1914.

O'Kane, Inj. Ins. 250, 1914.

Sanderson, Ins. Pests, 513, 1912.

Slingerland & Crosby, Man. Fr. Ins. 423, 1914.

Smith, N. C. B. 206, 57, 1910.

Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 14.

Williams, Ala. Poly. B. 155, 48, 1911.

——— Colo. B. 114, 12, 1906.

Amphicerus fortis

Sanderson, U. S. F. B. 223, 17, 1905.

Amphicerus punctipennis

Essig, Cal. Hort. B. II, 10, 681, 1913.

——— U. S. Y. B., 1906, 513.

Amphicerus sp.

Sanderson, U. S. B. 57, 38, 1906.

Amphicoma vulpina

Johannsen, Me. B. 187, 7, 1911.

Amphicyrte simplicipes

Burke, Pr. Ent. Soc. Wash. VII, 89, '05.

Anabrus simplex

Forbes, Ill. Ent. R. 23, 148, 1905.

Gillette, Colo. B. 101, 3, 1905.

Gillette, U. S. B. 52, 61, 1905.

Gillette, Colo. R. 19, 142, 1906.

Johnson, U. S. B. 52, 62, 1905.

Wilson, Oreg. Bien. Crop Pest R. f., 1913-1914, 134.

——— U. S. Y. B., 1905, 635.

Anagrus ovidentatus

Crosby & Leonard, N. Y. C. B. 346, 483, 1914.

Anametis grisea

Caesar, Ont. Ent. Soc. R. 42, 29, 1912.

Pettit, Mich. R. 53, 232, 1914.

Anaphes conotracheli

Brooks, W. Va. R. f., 1909-1910, 137.

Johnson & Girault, U. S. C. 73, 5, 1906.

Quaintance & Jenne, U. S. B. 103, 140, 1912.

Anaphes gracilis

Marlatt, U. S. B. 62, 60, 1906.

Quaintance, U. S. C. 124, 10, 1910.

Quaintance & Sasseer, U. S. C. 121, 6, 1910.

Anaphes sp. on alfalfa weevil

Webster, U. S. B. 112, 34, 1912.

Anaphoidea conotracheli*, see *Anaphes***Anaphora popeanella***

Forbes, Ill. Ent. R. 23, 44, 95, 1905.

Anaphothrips striatus

Beattie, U. S. F. B. 434, 23, 1911.

Hewitt, Ent. Soc. Ont. R. 42, 63, 1912.

Hewitt, J. Ec. Ent. VII, 211, 1914.

Johannsen, Me. B. 177, 30, 1910.

O'Kane, Inj. Ins. 204, 1914.

Pettit, Mich. B. 251, 282, 1908.

Pettit, Mich. Sp. B. 38, 293, 1908.

Pettit, Mich. B. 258, 304, 1910.

Price, Va. C. 7, 63, 1909.

——— U. S. Y. B., 1907, 543.

Anarsia lineatella

Adams, Ark. B. 92, 14, 1907.

Ball & Titus, Utah Hort. Comm. Bien. R. f., 1909-1910, 48, 1911.

Ball & Titus, Deseret Farm., May 6, 1911, 2.

Barre & Conradi, S. C. B. 141, 42, 1909.

Bremner, Cal. Hort. Comm. Destr. Ins. 6, 1910.

Clarke, Pac. Rur. Press, LXXXIII, 249, 1912.

Clarke, Cal. Fr. Grow., Feb. 10, 1912, 6.

Cooper, Cal. Hort. Comm. Ins. & Insect., 17, 1905.

Cordley, Better Fr., Aug. 1912, 10.

Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 115, 1905.

Ehrhorn, Cal. Hort. Comm. Bien. R. P. 2, 225, 1907.

Essig, Cal. Hort. B. II, 1-3, 170, 1913.

Felt, C. Gentl., 1910, 470.

Gillette, Colo. B. 114, 18, 1906.

Gillette, Colo. R. 19, 143, 1906.

Gillette, Better Fr., Feb. 1910, 21.

Gillette, Better Fr., July 1910, 22.

Gillette, Colo. Fr. Grow., Feb. 1910, 38.

- Gillette, Colo. Fr. Grow., July 1910, 14.
 Gossard, Ohio B. 198, 63, 1908.
 Gossard, Ohio B. 233, 127, 1911.
 Haseman, Mo. Hort. Soc., 1911, 260.
 Lyne, Pr. Ent. Soc. B. C., 3, 34, 1913.
 Nakayama, Cal. Hort. B. III, 7, 287, '14.
 Nivem, S. C. C. 21, 9, 1913.
 O'Kane, Inj. Ins. 248, 1914.
 Prozer, Cal. Cult. XXXIV, 603, 1910.
 Quaintance, U. S. Y. B., 1905, 344.
 Quaintance, Better Fr., June 1909, 20.
 Sanderson, Ins. Pests, 650, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 284, 385, 1914.
 Smith, Ga. Bd. Ent. B. 17, 91, 1905.
 Smith, Ga. Bd. Ent. B. 20, 165, 1906.
 Smith, Cal. Fr. Grow., Mar. 9, 1907, 1.
 Smith, N. J. B. 235, 39, 1911.
 Smith & Lewis, U. S. B. 60, 78, 1906.
 Taylor, Colo. B. 119, 8, 1906.
 Taylor, Colo. R. 19, 148, 1906.
 Taylor, Colo. Fr. Grow., Mar. 1907, 12.
 Taylor, Colo. P. B. 42, 1907.
 Weldon, Colo. B. 169, 3, 1910.
 Weldon, Colo. Fr. Grow., Feb. 1910, 10.
 Wilson, Oreg. Bien. Crop Pest R. f., 1913-1914, 113.
 Worsham, J. Ec. Ent. II, 207, 1909.
 Yothers, Wash. Pop. B. 61, 1914.
 ——— Pac. Rur. Press, LXXIII, 130, 1907.
 ——— Pac. Rur. Press, LXXIX, 161, 1910.
 ——— U. S. Y. B., 1905, 633.
- Anasa armiger**
 Smith, N. C. B. 205, 21, 1910.
- Anasa tristis**
 Baldwin, Ind. Ent. R. 5, 139, 1912.
 Barre & Conradi, S. C. B. 141, 38, 1909.
 Bentley, Tenn. Agr., vol. 2, no. 5, 174, 1913.
 Bentley, Tenn. Bd. Ent. R. f., '13, 36.
 Bethune, Ont. Agr. Coll. B. 171, 26, '09.
 Bremner, Cal. Hort. Comm. Destr. Ins., 12, 1910.
 Britton, Conn. R. 8, 811, 1909.
 Byrer, Farm. Guide, Feb. 18, 1905, 6.
 Chittenden, Ins. Inj. Veg. 161, 1907.
 Chittenden, U. S. C. 39, 2nd Ed., 1, '08.
 Clarke, Ala. Poly. B. 139, 20, 1907.
 Conradi, Tex. B. 89, 22, 1907.
 Cook, Cal. Cult. XXXIX, 201, 1912.
 Cooper, Cal. Hort. Comm. Ins. & Insect. 20, 1905.
 David, J. Ec. Ent. III, 181, 1910.
 David, Ill. Ent. R. 26, 118, 1911.
 Essig, Cal. Hort. B. II, 1-2, 146, 1913.
 Felt, Gard. Mag., June 1905, 234.
 Felt, C. Gentl., 1910, 1222.
 Fletcher, Can. Exp. Farms B. 52, 45, '05.
 Fulton, Wright & Gregg, Pa. B. 110, 38, 1911.
 Garcia, N. Mex. B. 68, 25, 1908.
 Gibson, Can. Hort. XXXIII, 145, '10.
 Girault, Ent. News, 1913, 56.
 Hunter, Pratt & Mitchell, U. S. B. 113, 15, 1912.
 Jarvis, Conn. Storrs B. 56, 268, 1909.
 Jenks, Amer. Cult., July 4, 1914, 3.
 Lewis, Pr. Ga. Hort. Soc. f., 1912, 12.
 Lochhead, Syn. Ec. Ent. 39, 1914.
 Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 17, 1906.
 Morrill, J. Ec. Ent. VI, 190, 1913.
 Morrill, S. W. Stockm., Aug. 15, 1913, 10.
 Newell, Proc. La. Agr. Soc. 18, 46, 1905.
 O'Kane, Inj. Ins. 190, 1914.
 Osborn, U. S. B. 52, 50, 1905.
 Patch, Me., B. 162, 364, 1908.
 Pettit, Mich. B. 233, 181, 1906.
 Postiff, Mich. Farm., July 13, 1912, 32.
 Price, Va., C. 7, 59, 1909.
 Rogers, O. Farm., June 14, 1913, p. 743.
 Rufert, Pac. Rur. Press, '13, LXXXV, 661.
 Sanborn, Okla. B. 100, 51, 1912.
 Sanderson, Ins. Pests, 294, 388, 1912.
 Scholl, Farm & Ranch, July 5, 1913, 8.
 Slingerland & Crosby, N. Y. C. B. 252, 344, 1908.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 471, 1910.
 Smith, Ga. Bd. Ent. B. 16, 46, 1905.
 Smith, N. C. B. 197, 54, 1908.
 Smith, N. C. B. 205, 18, 1910.
 Surface, Pa. D. A. Zoöl. V. 12, 380, 1908.
 Surface, Pa. D. A. Zoöl. I, 1, 29, 1911.
 Surface, Pa. D. A. Zoöl. II, 5, 195, 1912.
 Swenk, Nebr. Bd. Agr. R. f., 1908, 305.
 Swenk, Nebr. Bd. Agr. R. f., 1910, 369.
 Symons, Md. B. 101, 182, 1905.
 Wells, Am. Agric., May 5, 1906, 584.
 Wells, Or. Judd. Farm., May 5, '06, 648.

Anasa tristis (*Cont'd*)

- Wells, Nat'l Fr. Grow. & Gard., June 1910, 20.
 Wells, Mich. Farm., July 5, 1913, p. 18.
 Williams, Nebr. Farm., June 7, '06, 507.
 ——— C. Gentl., 1906, 1208.
 ——— C. Gentl., 1909, 775.
 ——— Pac. Rur. Press, LXXIV, 243, 1907.
 ——— Prai. Farm., LXXVIII, 361, '06.
 ——— Rur. N. Y., 1913, 975.
 ——— U. S. Y. B., 1907, 544.
 ——— U. S. Y. B., 1908, 572.

Anastatus bifasciatus

- Burgess, U. S. F. B. 564, 7, 1914.
 Fiske, Mass. For. R. 6, 89, 1910.
 Howard, U. S. R. Ent., 1909, 10.
 Howard, U. S. R. Ent., 1910, 13.
 Howard, Mass. For. R. 7, 97, 1911.
 Howard, U. S. R. Ent., 1911, 10.
 Howard, Mass. For. R. 9, 71, 1912.
 Howard, Mass. For. R. 10, 83, 1913.
 Howard, U. S. R. Ent., 1912, 10.
 Howard, U. S. R. Ent., 1913, 2.
 Howard, Ann. Ent. Soc. Am. VII, 86, '14.
 Howard, U. S. R. Ent. 14, 3.
 Howard & Fiske, U. S. B. 91, 75 *et seq.*, 1911.
 Howard & Fiske, U. S. B. 91, 168, 1911.

Anastrepha ludens

- Compere, Rur. Calif., Jan. 1911, 6.
 Cook, Pom. Jour. Ent. III, 576, 1911.
 Cooper, Cal. Hort. Comm. C. Feb. '06, 2.
 Cooper, Cal. Hort. Comm. Bien. R. 2, 10, 1907.
 Crawford, Pom. Jour. Ent. II, 321, 1910.
 Crawford, Cal. Hort. B. I. 2, 46, 1912.
 Ehrhorn, Pac. Rur. Press, LXXVI, 388, 1908.
 Herrera, J. Ec. Ent. I, 169, 1908.
 Isaac, Cal. Cult., 1905, XXV, 172.
 Isaac, Cal. Fr. Grow., Aug. 19, 1905, 3.
 Isaac, Cal. Hort. Comm. R., 1905.
 Maskew, Cal. Hort. B. II, 7, 575, '13.
 Quayle, Cal. B. 214, 503, 1911.
 Severin, Can. Ent. 1913, 310.
 ——— Cal. Hort. Bien. R. 1, 43, 1905.
 ——— U. S. Fed. Hort. Bd. Quar. Not. 5, 1913.

Anastrepha ludens, *Legislation*

- Fla. Dept. Agr. Quart. B. 4, vol. 22, 47, 1912.

Anastrepha ludens, *Quarantine*

- Cal. Hort. B. I, 12, 925, 1912.

Anatis 15-punctata

- Britton, J. Ec. Ent. III, 434, 1910.
 Britton, Conn. R. 10, 663, 705, 1911.
 Britton, Conn. B. 181, 13, 1914.

Anatis ocellata

- Felt, N. Y. R. 25, 86, 1910.
 Felt, N. Y. St. Mus. Mem. 8, 604, 1906

Anax longipes

- Chittenden, U. S. B. 82, 23, 1909.

Ancylys comptana

- Adams, Ark. B. 92, 16, 1907.
 Baldwin, Ind. Ent. R. 5, 119, 1912.
 Barre & Conradi, S. C. B. 141, 48, 1909.
 Bruner, Nebr. Ent. R. f., 1907–1908, 8.
 Chandler, Mo. B. 102, 263, 1912.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 123, 1913.
 Fulton, Wright & Gregg, Pa. B. 110, 38, 1911.
 Gillette, Colo. B. 114, 26, 1906.
 Gillette, Better Fr., Feb. 1910, 23.
 Hart, Ill. Ent. R. 26, 86, 1911.
 Herrick, Rur. N. Y., 1912, 720.
 Moore, Wis. B. 190, 30, 1910.
 Nicholson, Okla. B. 69, 18, 1905.
 O'Kane, Inj. Ins. 303, 1914.
 Oscamp, Ind. B. 164, 763, 1913.
 Sanderson, Ins. Pests, 452, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 361, 1914.
 Smith, N. J. R., 1908, 322.
 Smith, N. J. B. 225, 17, 1909.
 Swenk, Nebr. C. Ins. Pest Bur. 7, 1, '08.
 Swenk, Nebr. Hort. Soc., 1909, 91.
 ——— U. S. Y. B., 1906, 517.
 ——— U. S. Y. B., 1907, 552.

Ancylys nubeculana

- Britton, Conn. R. 8, 847, 1909.
 Felt, C. Gentl., 1908, 107.
 Felt, J. Ec. Ent. I, 149, 1908.
 Felt, N. Y. R. 23, 28, 1908.
 Gossard, Ohio B. 233, 101, 1911.
 Hitchings, Me. Comm. Agr. R., 1907, 302, 1908.
 Hitchings, Me. Ent. R. 3, 98, 1908.
 Johannsen, Me. B. 177, 26, 1910.
 Johannsen & Patch, Me. Comm. Agr. R. f., 1910, 364.
 Lochead, Syn. Ec. Ent. 52, 1914.
 O'Kane, Inj. Ins. 305, 1914.

- Slingerland & Crosby, Man. Fr. Ins. 61, 1914.
 Willing, Ont. Ent. Soc. R. 35, 28, 1905.
 ——— U. S. Y. B., 1907, 547.
- Ancyrophorus planus**
 Forbes, Ill. Ent. R. 23, 180, 1905.
- Andricus clavula**
 Felt, N. Y. St. Mus. Mem. 8, 624, 1906.
- Andricus cornigerus**
 Felt, N. Y. St. Mus. 8, 624, 1906.
- Andricus lana**
 Felt, N. Y. St. Mus. Mem. 8, 625, 1906.
- Andricus operator**
 Felt, N. Y. St. Mus. Mem. 8, 622, 1906.
- Andricus petiolicola**
 Felt, N. Y. St. Mus. Mem. 8, 625, 1906.
- Andricus pulchra**
 Felt, N. Y. St. Mus. Mem. 8, 627, 1906.
- Andricus punctatus**
 Felt, N. Y. St. Mus. Mem. 8, 623, 1906.
- Andricus seminator**
 Felt, N. Y. St. Mus. Mem. 8, 622, 1906.
- Andricus singularis**
 Felt, N. Y. St. Mus. Mem. 8, 625, 1906.
- Angitia plutellae**
 Marsh, U. S. B. 109, 75, 1913.
- Angoumois grain moth**, *see* **Sitotroga cerealella**
- Angular-winged katydid**, *see* **Microcentrum**
- Ania limbata**
 Felt, N. Y. St. Mus. Mem. 8, 530, 1906.
- Anisocyrtia sp.**
 Howard & Fiske, U. S. B. 91, 138, 1911.
- Anisocyrtia sp. on plum curculio**
 Quaintance & Jenne, U. S. B. 103, 148, 1912.
- Anisodactylus rusticus**
 Forbes, Ill. Ent. R. 23, 177, 1905.
- Anisopteryx pometaria**, *see* **Alsophila**
- Anisopteryx vernata**, *see* **Paleacrita**
- Anisosticta seriata**
 Britton, Conn., B. 181, 22, 1914.
- Anisosticta strigata**
 Britton, Conn., B. 181, 23, 1914.
- Anisota rubicunda**
 Felt, N. Y. St. Mus. Mem. 8, 537, 1906.
 Felt, C. Gentl., 1908, 107.
 Felt, J. Ec. Ent. I, 150, 1908.
 Felt, N. Y. R. 23, 13, 1908.
 Girault, Ent. News, 1913, 59.
 Herrick, Rur. N. Y., 1911, 704.
- Hewitt, Ont. Ent. Soc. R. 41, 29, 1911.
- Howard & Chittenden, U. S. C. 110, 1, 1909.
- Jackson, N. H. R. 19-20, 523, 1908.
- Patch, Me. B. 148, 263, 1907.
- Patch, Me. B. 162, 354, 1908.
 ——— U. S. Y. B., 1907, 550.
 ——— U. S. Y. B., 1908, 577.
- Anisota senatoria**
 Bethune, Ont. Ent. Soc. R. 40, 65, 1910.
 Cory, Md. Hort. Soc., 1912, 191, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 306, 1905.
 Loveland, R. I. R., 1911, Ent. Dept. 13.
 Newell & Smith, U. S. B. 52, 72, 1905.
 Swaine, Ont. Ent. Soc. R. 41, 98, 1911.
 Symons & Cory, Md. B. 175, 179, 1913.
 Weiss, N. J. R., 1912, 429.
- Anisota stigma**
 Felt, N. Y. St. Mus. Mem. 8, 527, 1906.
 Jackson, N. H. R. 19-20, 523, 1908.
- Anisota virginiensis**
 Fyles, Ont. Ent. Soc. R. 40, 73, 1910.
 Patch, Me. B. 162, 353, 1908.
- Anobium tessellatum**
 Herrick, Household Ins. 389, 1914.
- Anomala binotata**
 Felt, N. Y. R. 28, 106, 1913.
 Hart, Ill. Ent. R. 26, 73, 1911.
 Pettit, Mich. B. 251, 291, 1908.
 Swenk, Nebr. Ent. B. 1, 87, 1913.
- Anomala lucicola**
 Felt, N. Y. St. Mus. Mem. 8, 682, 1906.
 O'Kane, Inj. Ins. 262, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 402, 1914.
- Anomala marginata**
 Slingerland & Crosby, Man. Fr. Ins. 402, 1914.
 Stiles, J. Ec. Ent. II, 362, 1909.
- Anomala semilivida**
 Titus, U. S. B. 54, 88, 1905.
- Anomala undulata**
 Forbes, Ill. Ent. R. 23, 185, 1905.
- Anomalon exile**
 Howard & Fiske, U. S. B. 91, 144, 1911.
- Anopodias error**
 Webster, U. S. C. 69, 4, 1906.
- Anopheles**
 Jordan & Hefferman, Jr. Infect. Dis., Jan. 1905, 56.
 Knab, Amer. Jr. Trop. Dis. I, 33, 1913.

- Knab, Amer. Soc. Trop. Med., VIII, 58, 1913.
 Mitchell, Mosq. Life N. Y., 136, 1907.
 Reardan, Calif. St. Jr. Med., Feb. '11, 74.
 Smith, Science, XXI, 71, 1905.
 Woldert, Amer. Med., Mar. 24, '06, 423.
 ——— N. C. Bd. Health, Sp. B. 15, 8, 1912.
- Anopheles and malaria**
 Chico, Amer. Jr. Pub. Hygiene, '10, 561.
 Howard, Osler's Mod. Med., I, 378, '07.
 Knab, Amer. Jr. Trop. Dis., July '13, 33.
 Knab, Amer. Jr. Trop. Dis., Sept. 1913, 227.
 Veazie, Science, XXIII, 407, 1906.
- Anopheles in seawater.**
 Howard, Science, XXVII, 274, 1908.
- Anopheles barberi**
 Smith, N. J. R., 1905, 671.
- Anopheles crucians**
 Coffin, Md. B. 109, 87, 1906.
 Howard, U. S. F. B. 450, 9, 1911.
 Smith, N. J. R., 1910, 424.
- Anopheles maculipennis**
 Britton & Viereck, Conn. R. 4, 263, '05.
 Chambliss, S. C. Clem. Agr. Coll. Ext. Work, II, 5, 6, 1906.
 Coffin, Md. B. 109, 87, 1906.
 Dietz, Ind. Ent. R. 5, 161, 1912.
 Doane, Ins. Disease, 106, 1910.
 Felt, N. Y. St. Mus. B. 129, 12, 1909.
 Felt, N. Y. St. Mus. B. 136, 17, 1912.
 Garman, U. S. B. 60, 17, 1906.
 Herrick, Household Ins. 60, 1914.
 Howard, Osler's Mod. Med. I, 383, 1907.
 Howard, U. S. B. 78, 1909.
 Howard, U. S. F. B. 450, 9, 1911.
 Howard, U. S. R. Ent., 1914, 7.
 Lochhead, Syn. Ec. Ent. 86, 1914.
 Ludlow, Med. Record, Jan. 26, '06, 95.
 Quayle, Cal. B. 178, 51, 1906.
 Rosenau, Prevent. Med. 207, 1913.
 Symons, Md. B. 134, 216, 1909.
- Anopheles punctipennis**
 Britton & Viereck, Conn. R. 4, 263, '05.
 Coffin, Md. B. 109, 86, 1906.
 Dietz, Ind. Ent. R. 5, 162, 1912.
 Herrick, Household Ins. 63, 1914.
 Howard, U. S. F. B. 450, 9, 1911.
- Anopheles quadrimaculatus, see A. maculipennis**
- Anopheles sp.**
 Britton, Conn. Ent. R. 7, 318, 1907.
 Headlee, Kans. Agr. Educ. I, 3, 32, 1909.
 Ludlow, Bull. 4, Off. Surg. Gen. War. Dept., 1914.
 Whitmarsh, Ohio B. 253, 115, 1912.
 Woldert, Amer. Med. XI, 423, 1906.
- Anopheles**
 Robertson, Va. Med. Semi-Monthly, Sept. 10, 1909, 25.
- Anosia plexippus**
 Garman, J. Ec. Ent. V, 468, 1912.
 Johannsen & Patch, Me. B. 195, 238, 1911.
 Nash, Ont. Ent. Soc. R. 40, 15, 1910.
- Antherea eucalypti**
 Ehrhorn, Pac. Rur. Press, LXXVI, 404, 1908.
- Antherea polyphemus**
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 40, 1906.
- Anthocoris melanocerus**
 Cooley, Mont. B. 98, 124, 1914.
- Anthomyia brassicae, see Pegomyia**
Anthomyia canicularis, see Homalomyia
Anthomyia fusciceps, see Pegomyia
Anthomyia radicum, see Pegomyia brassicae
- Anthonomus aeneolus**
 Pierce, U. S. B. 73, 46, 1908.
 Pierce, U. S. B. 100, 77, 1912.
- Anthonomus aeneotinctus**
 Pierce, U. S. B. 63, 39, 1907.
 Pratt, U. S. B. 63, 55, 1907.
 Walker, U. S. B. 54, 43, 1905.
 ——— U. S. Y. B., 1905, 629.
- Anthonomus albopilosus**
 Pierce, U. S. B. 73, 46, 1908.
 Pierce, U. S. B. 100, 76, 1912.
- Anthonomus aphanostephi**
 Pierce, U. S. B. 100, 77, 1912.
- Anthonomus crataegi, see Pseudanthonomus**
- Anthonomus disjunctus**
 Pierce, U. S. B. 63, 41, 1907.
 Pierce, U. S. B. 73, 46, 1908.
- Anthonomus eugenii**
 Chittenden, Ins. Inj. Veg. 240, 1907.
 Pierce, U. S. B. 73, 46, 1908.
 Pierce, U. S. B. 100, 77, 1912.
- Anthonomus fulvus**
 Pierce, U. S. B. 63, 40, 1907.

- Pierce, U. S. B. 73, 45, 1908.
 Pierce, U. S. B. 100, 76, 1912.
- Anthrenomus grandis**
 Barre & Conradi, S. C. B. 141, 32, 1909.
 Bennett, Okla. Bien. R. 1, pt. V. 23, '08.
 Bennet, U. S. F. B. 314, 5, 1908.
 Bentley, Tenn. Bd. Ent. R. f., 1913, 38.
 Bishopp, U. S. C. 140, 1911.
 Clarke, Ala. Poly. R. 19, 36, 1907.
 Clothier, Ariz. B. 60, 430, 1909.
 Coad, J. Agr. Res. II, 235, 1914.
 Conradi, U. S. B. 60, 107, 1906.
 Cook, U. S. F. B. 501, 1912.
 Cushman, J. Ec. Ent. IV, 432, 1911.
 Ehrhorn, Pac. Rur. Press, LXXVI, 388, 1908.
 Flynn, Tex. Stockm. Farm., Nov. 6, '07, 19.
 Flynn, La. B. 92, 4, 1907.
 Flynn, La. Crop Pest Comm. C. 11, 5, 1907.
 Fullerton, Tex. Stockm. Farm., Sept. 10, 1913, 11.
 Gibson, Tex. Stockm. Farm., Aug. 21, 1907, 2.
 Harned, Miss. B. 139, 4, 1910.
 Harrell, Farm & Ranch, Jan. 6, 1906, 19.
 Hayhurst, Farm & Ranch, Oct. 28, 1911, 11.
 Hinds, U. S. B. 59, 1906.
 Hinds, U. S. B. 60, 111, 1906.
 Hinds, U. S. B. 74, 1907.
 Hinds, Tex. Stockm. Farm., May 1, 1907, 4.
 Hinds, J. Ec. Ent. I, 233, 1908.
 Hinds, Ala. Poly. B. 146, 81, 593, 617, 1909.
 Hinds, Ala. Poly. R. 21, 26, 1909.
 Hinds, Tex. Stockm. Farm., Sept. 21, 1910, 7.
 Hinds, Ala. Poly. B. 159, 1911.
 Hinds, Ala. Poly. R. 23, 19, 1911.
 Hinds, South. Cult., Nov. 1, 1911, 14.
 Hinds, Ala. Poly. C. 5, 1912.
 Hinds, Ala. Poly. C. 6, 1912.
 Hinds, Ala. Poly. C. 7, 1912.
 Hinds, Ala. Poly. C. 19, 142, 1912.
 Hinds, Ala. P. B. 54, 1912, 750.
 Hinds, Ala. Poly. R. 24, 24, 1912.
 Hinds, Ala. Poly. R. 25, 22, 1913.
 Hinds, South. Cult., Dec. 15, 1913, 10.
 Hinds, Ala. Poly. B. 178, 1914.
- Hinds, J. Ec. Ent. VII, 65, 1914.
 Howard, U. S. R. Ent., 1905, 274.
 Howard, U. S. R. Ent., 1906, 5.
 Howard, U. S. R. Ent., 1907, 6.
 Howard, U. S. R. Ent., 1908, 6.
 Howard, U. S. R. Ent., 1909, 14.
 Howard, U. S. R. Ent., 1910, 14.
 Howard, U. S. R. Ent., 1911, 13.
 Howard, U. S. R. Ent., 1912, 13.
 Howard, U. S. R. Ent., 1913, 5.
 Howard, U. S. R. Ent., 1914, 5.
 Hunter, U. S. F. B. 216, 1905.
 Hunter, Tex. Stockm. Farm., July 11, 1906, 11.
 Hunter, Tex. Stockm. Farm., Dec. 19, 1906, 4.
 Hunter, U. S. Y. B., 1906, 313.
 Hunter, Farm & Ranch, Apr. 13, '07, 7.
 Hunter, Tex. Stockm. Farm., Apr. 3, 1907, 1.
 Hunter, Tex. Stockm. Farm., Aug. 7, 1907, 15.
 Hunter, Tex. Stockm. Farm., Oct. 2, 1907, 2.
 Hunter, Tex. Stockm. Farm., Nov. 6, 1907, 14.
 Hunter, U. S. C. 95, 1, 1907.
 Hunter, Okla. Bien. R. 1, pt. V, 36, 1908.
 Hunter, Tex. Stockm. Farm., June 17, 1908, 7.
 Hunter, Tex. Stockm. Farm., July 28, 1909, 2.
 Hunter, Miss. B. 120, 17, 1908.
 Hunter, Tex. Stockm. Farm., Mar. 10, 1909, 11.
 Hunter, Tex. Stockm. Farm., Oct. 6, 1909, 7.
 Hunter, Tex. Stockm. Farm., Oct. 13, 1909, 4.
 Hunter, U. S. C. 107, 1909.
 Hunter, U. S. F. B. 344, 5, 1909.
 Hunter, U. S. C. 122, 1910.
 Hunter, U. S. C. 146, 1912.
 Hunter, U. S. C. 167, 1913.
 Hunter, U. S. F. B. 500, 1912.
 Hunter, U. S. Y. B., 1911, 202.
 Hunter, U. S. F. B. 512, 1912.
 Hunter & Hinds, U. S. B. 51, 17, 1905.
 Hunter & Pierce, U. S. B. 114, 15, 1912.
 Jarman, South. Cult., Feb. 15, '14, 50.
 Knapp, South. Cult. Dec. 15, 1910, 6.
 Knapp, U. S. F. B. 422, 9, 1910.

Anthonomus grandis (*Cont'd*)

- Lewis, South. Cult., Feb. 15, 1911, 51.
 Lloyd, Miss. B. 120, 11, 1908.
 Marston, Farm & Ranch, Jan. 20, '06, 19.
 Mayer, La. Crop Pest Comm. C. 16, 3, 1907.
 Meredith, South. Cult., Mar. 15, '14, 10.
 Moorhouse & Nicholson, Okla. B. 77, 54, 1908.
 Morgan, Tenn. Dept. Agr. Bien. R., 1907-1908, 33.
 Newell, La. Crop Pest Comm. C. 3, 5, 1905.
 Newell, La. Crop Pest Comm. C. 5, 3, 1906.
 ✕Newell, La. Crop Pest Comm. C. 9, 3, 1906.
 Newell, La. Crop Pest Comm. C. 15, '07.
 Newell, Farm & Ranch, June 15, '07, 3.
 Newell, Tex. Stockm. Farm., Aug. 7, 1907, 13.
 Newell, Farm & Ranch, May 23, '08, 16.
 Newell, Farm & Ranch, Oct. 17, '08, 7.
 Newell, La. Crop Pest Comm. C. 22, '08.
 Newell, La. Crop Pest Comm. C. 24, 41, 1908.
 Newell, La. Crop Pest Comm. C. 25, 2, 1909.
 Newell, La. Crop Pest Comm. C. 28, '09.
 Newell, U. S. B. 60, 119, 1906.
 Newell & Barber, La. Crop Pest Comm. C. 23, 9, 1908.
 Newell & Paulsen, J. Ec. Ent. I, 113, '08.
 Newell & Rosenfeld, J. Ec. Ent. I, 151, 1908.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 26, 65, 1909.
 O'Kane, Inj. Ins. 208, 1914.
 ✕Pierce, U. S. B. 63, 39, 1907.
 Pierce, Pr. Ent. Soc. Wash. XIII, 111, 1911.
 ✕Pierce, J. Agr. Res. I, 89, 1913.
 Pierce & Morrill, Pr. Ent. Soc. Wash. XVI, 14, 1914.
 Rosenfeld, J. Ec. Ent. III, 212, 1910.
 Sanderson, U. S. B. 52, 29, 1905.
 Sanderson, Ins. Pests, 261, 1912.
 Scott, South. Cult., Feb. 15, 1911, 9.
 Shannon, Farm & Ranch, Nov. 25, 1905, 18.
 Sherman, N. C. Ent. C. 14, 1905.
 Sherman, Prog. Farm., Feb. 14, '05, 2.
 Sherman, N. C. Dept. Agr. B. 29, 6, 42, 1908.
 Sherman, N. C. Ent. C. 27, 1910.
 Sherman, Prog. Farm., Nov. 1, '13, 1136.
 Smith, South. Cult., Aug. 15, 1906, 6.
 Stringfellow, Farm & Ranch, May 26, 1906, 6.
 Watson, Fla. R., 1912, lxii.
 Wentworth, Tex. Stockm. Farm., July 11, 1906, 7.
 ——— C. Gentl., July 20, 1912, 24.
 ——— Miss. Osyka Crop Growers Assoc. C. 1, Aug. 1909.
 ——— Prog. Farm., 1911, 481, cont.
 ——— U. S. Y. B., 1905, 630.
 ——— U. S. Y. B., 1906, 508.
 ——— U. S. Y. B., 1907, 541.
 ——— U. S. Y. B., 1908, 567.

Anthonomus grandis and birds

- Bailey, U. S. Biol. Survey B. 22, 1905.
 Davis, Farm & Ranch, Mar. 5, 1910, 6.
 Dixon, Farm & Ranch, Aug. 24, 1907, 7.
 Hayhurst, Farm & Ranch, Jan. 6, '12, 13.
 Henshaw, U. S. Bio. Survey, C. 57, 1907.
 Howell, U. S. Bio. Survey, B. 25, 1906.
 Howell, Tex. Stockm. Farm., Feb. 27, 1907, 7.
 Howell, U. S. Bio. Survey, B. 29, 1907.
 Howell, U. S. Bio. Survey, C. 64, 1908.
 Hunter & Hinds, U. S. B. 51, 150, 1905.

Anthonomus grandis, Hibernation of

- ✕Hinds & Yothers, U. S. B. 77, 1909.
 Newell & Dougherty, La. Crop Pest Comm. C. 31, 163, 1909.
 Sanderson, U. S. B. 63, 1, 1907.

Anthonomus grandis, Lime and Carbolic acid

- Stringfellow, Farm & Ranch, Aug. 31, 1907, 3.

Anthonomus grandis, Parasites of

- Hunter, Newell & Pierce, La. Crop Pest Comm. C. 20, 3, 1907.
 Pierce, U. S. B. 73, 9, 1907.
 Pierce, J. Ec. Ent. I, 117, 315, 1908.

Anthonomus grandis, Insect enemies of

- Pierce, U. S. B. 100, 9, 1912.

Anthonomus grandis, Paris green for

- Barnes, Farm & Ranch, Apr. 21, '06, 17.
 Barnes, Farm & Ranch, Apr. 29, '05, 16.
 Lomas, Farm & Ranch, May 2, 1908, 7.
 Marston, Farm & Ranch, May 27, '05, 6.

- Marston, Frierson & Newell, La. Crop Pest Comm. C. 8, 5, 1906.
Newell & Smith, La. Crop Pest Comm. C. 33, 251, 1909.
- Anthonomus grandis**, *Quarantine*
Barrow, Prog. Farm., Sept. 27, 1913, 1011.
Bentley, Tenn. B. 99, 81, 1913.
Bentley, Tenn. Bd. Ent. R. 8, 50, 1913.
Cook, Cal. Hort. Comm. Statutes, 1912, 24.
Ehrhorn, Cal. Hort. Comm. Bien R. 3, 12, 1909.
Herrick, Miss. Ent. R., 1905.
Hinds, Ala. Poly. B. 146, 86, 1909.
Hinds, Ala. P. B. 50, 1911.
Hinds, Ala. P. B. 51, 1911.
Hinds, Ala. P. B. 54, 1911-1912.
Hinds, Ala. Poly. C. 16, 1912.
Hunter, U. S. F. B. 216, 25, 1905.
Hunter, U. S. F. B. 512, 40, 1912.
Hunter, J. Ec. Ent. VII, 234, 1914.
Newell, La. Crop Pest Comm. C. 5, 11, 1906.
Sherman, N. C. Ent. C. 27, 1910.
Smith, Ga. Bd. Ent. B. 20, 178, 1906.
Smith, Ga. Ent. R. f., 1906, 10.
—— Cal. Hort. B. I, 13, 953, 1912.
—— Fla. Dept. Agr. Quart. B. 4, vol. 22, 34, 1912.
—— Okla. Bien. R. 1, pt. III, 34, '08.
—— S. C. C. 15, 1913.
—— S. C. C. 16, 1913.
—— S. W. Stockm., Dec. 5, '13, 10.
—— Tenn. Bd. Ent. B. 6, 72, 1912.
—— Tenn. Bd. Ent. B. 7, 10, 1912.
—— Tenn. Bd. Ent. R. 7, 57, 1912.
—— Tenn. Bd. Ent. R. f., 1913, 38.
- Anthonomus grandis thurberiae**
Morrill, S. W. Stockm., Oct. 31, '13, 14.
Morrill, S. W. Stockm., Jan. 16, '14, 18.
Pierce, J. Agr. Res. I, 90, 1913.
- Anthonomus heterothecae**
Pierce, U. S. B. 100, 77, 1912.
- Anthonomus nebulosus**
Pierce, U. S. B. 100, 77, 1912.
- Anthonomus nigrinus**
Pierce, U. S. B. 73, 46, 1908.
Pierce, U. S. B. 100, 76, 1912.
- Anthonomus prunicida**, *see* A. scutellaris
- Anthonomus quadrigibbus**
Baldwin, Ind. Ent. R. 5, 84, 1912.
- Blair, Prai. Farm., May 15, 1908, 6.
Brooks, W. Va. R. f., 1909-1910, 139.
Brooks, W. Va. B. 126, 113, 1910.
Caesar, Ont. Ent. Soc. R. 43, 76, 1913.
Caesar, Ont. Ent. Soc. R. 44, 50, 1914.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 57, 1913.
Douglass, Ind. Ent. R. 3, 124, 1910.
Fulton, Wright & Gregg, Pa. B. 110, 15, 1911.
Funk, Pa. Dept. Agr. B. 152, 227, 1907.
Garman, Ky. B. 133, 22, 1908.
Gossard, Ohio B. 198, 50, 1908.
Gossard, Ohio B. 233, 91, 1911.
Hewitt & Hayhurst, Ark. B. 109, 442, 1911.
Johannsen & Patch, Me. Comm. Agr. R. f., 1910, 372.
Lochhead, Ont. Ent. Soc. R. 35, 29, '05.
Lochhead, Ont. Ent. Soc. R. 40, 68, '10.
Lochhead, Syn. Ec. Ent. 80, 1914.
Moore, Wis. B. 190, 23, 1910.
Moore, Wis. B. 207, 27, 1911.
O'Kane, Inj. Ins. 333, 1914.
Petch, Ont. Ent. Soc. R. 43, 73, 1913.
Powers, Ill. Hort. Soc. f., 1906, 245.
Quaintance & Jenne, U. S. B. 103, 28, 1912.
Ruggles & Stakman, Minn. B. 121, 13, 1911.
Sanderson, Ins. Pests, 634, 1912.
Slingerland & Crosby, Man. Fr. Ins. 35, 1914.
Smith, N. C. B. 206, 82, 1910.
Stephens, Nebr. Hort. Soc., 1906, 31.
Swaine, Ont. Ent. Soc. R. 41, 94, 1911.
Swenk, Nebr. Hort. Soc., 1906, 252.
Symons, Md. B. 101, 144, 1905.
Weldon, Md. Hort. Soc., 1907, 66, 1908.
Wells, Mich. Farm. June 15, 1907, v. 51, p. 610.
—— Kans. Hort. Soc., 1911, 316.
- Anthonomus scutellaris**
Adams, Ark. B. 92, 10, 1907.
Baldwin, Ind. Ent. R. 5, 99, 1912.
Cooley, Mont. B. 62, 211, 1905.
Cooley, Mont. B. 88, 88, 1912.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 87, 1913.
Gillette, Colo. B. 114, 17, 1906.
Gillette, Better Fr. Feb. 1910, 20.
Gossard, Ohio B. 198, 59, 1908.

Anthonomus scutellaris (*Cont'd*)

- Gossard, Ohio B. 233, 118, 1911.
 Howard, U. S. B. 54, 84, 1905.
 Johnson, Colo. Fr. Grow., Nov. '08, 6.
 Moore, Wis. B. 190, 26, 1910.
 O'Kane, Inj. Ins. 334, 1914.
 Quaintance & Jenne, U. S. B. 103, 28, 1912.
 Sanderson, Ins. Pests, 661, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 251, 1914.
 Stringfellow, Farm & Ranch, May 5, 1906, 2.
 Stringfellow, Farm & Ranch, Feb. 22, 1908, 10.
 Swenk, Nebr. Hort. Soc. 1909, 76.
- Anthonomus signatus**
 Adams, Ark. B. 92, 16, 1907.
 Ball & Titus, Deseret Farm, May 6, 1911, 3.
 Britton, Conn. R. 8, 846, 1909.
 Caesar, Ont. Ent. Soc. R. 43, 82, 1913.
 Card, Mass. Crop R. f., July 1905, 35.
 Close, Ballard & White, Md. B. 160, 220, 1911.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 125, 1913.
 Ehrhorn, Pac. Rur. Press, LXXVI, 388, 1908.
 Headlee, N. J. Hort. Soc., 1913, 52.
 Hitchings, Me. Comm. Agr. R., 1906, 198, 1907.
 Hitchings, Me. Ent. R. 2, 28, 1907.
 Lochhead, Ent. Soc. Ont. R. 39, 124, '09.
 Lochhead, Ont. Ent. Soc. R. 35, 30, '05.
 Lochhead, Syn. Ec. Ent. 81, 1914.
 Morrill, U. S. B. 63, 59, 1907.
 O'Kane, Inj. Ins. 337, 1914.
 Oskamp, Ind. B. 164, 764, 1913.
 Patch, Me. B. 148, 270, 1907.
 Pettit, Mich. B. 244, 219, 1907.
 Pierce, U. S. B. 63, 39, 1907.
 Pierce, U. S. B. 73, 45, 1908.
 Pierce, U. S. B. 100, 76, 1912.
 Sanderson, Ins. Pests, 456, 1912.
 Sherman, Ont. Ent. Soc. R. 36, 22, 1906.
 Sherman, Prog. Farm., May 7, '08, 3.
 Sherman, J. Ec. Ent. II, 202, 1909.
 Sherman, N. C. Dept. Agr. B. 34, 8, 21, 1913.
 Sherman, Prog. Farm., May 10, '13, 593.
 Slingerland, Rur. N. Y., 1908, 804.
- Slingerland & Crosby, Man. Fr. Ins. 372, 1914.
 Smith, N. J. R., 1908, 323.
 Smith, N. J. B., 225, 8, 1909.
 Smith, N. C. R. 33, 33, 1910.
 Smith, N. J. R., 1911, 412.
 Symons, Md. B. 101, 158, 1905.
 Weiss, N. J. R., 1912, 434.
 Whiteside, Mont. Bd. Hort. f., 1907-1908, 44, 1909.
 ——— U. S. Y. B., 1905, 630.
 ——— U. S. Y. B., 1907, 552.
 ——— U. S. Y. B., 1908, 573.
- Anthonomus sp. on currants**
 Cooley, Mont. B. 92, 61, 1912.
- Anthonomus squamosus**
 Pierce, U. S. B. 63, 42, 1907.
 Pierce, U. S. B. 73, 46, 1908.
 Pierce, U. S. B. 100, 77, 1912.
- Anthonomus suturalis**
 Hardenberg, Wis. B. 159, 20, 1908.
 Hardenberg & Malde, Wis. R. 24, 313, 1907.
- Anthophilax attenuatus**
 Felt, N. Y. St. Mus. Mem. 8, 488, 1906.
- Anthothrips niger**
 Hooker, U. S. B. 65, 13, 1907.
- Anthrenus castaneae**
 Felt, N. Y. St. Mus. Mem. 8, 614, 1906.
- Anthrenus museorum**
 Dean, Kans. B. 189, 232, 1913.
- Anthrenus scrophulariae**
 Bethune, Ont. Agr. Coll. R. 32, 46, 1907.
 Dietz, Ind. Ent. R. 5, 181, 1912.
 Douglass, Ind. Ent. R. 1, 159, 1908.
 Douglass, Ind. Ent. R. 2, 77, 1910.
 Essig, Cal. Cult., XXXVII, 567, 1911.
 Felt, N. Y. St. Mus. B. 129, 25, 1909.
 Felt, N. Y. St. Mus. B. 136, 30, 1912.
 Fletcher, Can. Ent., 1905, 333.
 Herrick, Household Ins. 203, 1914.
 Howard, U. S. F. B. 626, 1914.
 Lochhead, Ont. Ent. Soc. R. 35, 32, '05.
 Lochhead, Can. Ent., 1906, 67.
 Lochhead, Syn. Ec. Ent. 70, 1914.
 O'Kane, Inj. Ins. 357, 1914.
 Patch, Me. B. 123, 217, 1905.
 Pettit, Mich. Farm, Aug. 31, 1907, 145.
 Smith, N. J. B. 203, 13, 1907.
 Surface, Pa. D. A. Zoöl. V, 12, 387, 1908.
 Surface, Pa. D. A. Zoöl. III, 1, 17, 1913.
 Washburn, Minn. R. 11, 69, 1906.

- Whitmarsh, Ohio B. 253, 116, 1912.
 ——— Rur. N. Y., 1908, 654.
 ——— Rur. N. Y., 1911, 790.
- Anthrenus verbasci**
 Dean, Kans. B. 189, 232, 1913.
 Felt, J. Ec. Ent. II, 193, 1909.
 Felt, N. Y. R. 25, 96, 1910.
 Felt, J. Ec. Ent. V. 297, 1912.
 Surface, Pa. D. A. Zoöl. III, 1, 18, 1913.
 Viereck, U. S. B. 52, 48, 1905.
 Whitmarsh, Ohio B. 253, 118, 1912.
- Anticarsis gemmatilis**
 Chittenden, U. S. B. 54, 77, 1905
 Scott, Fla. B. 102, 57, 1910.
 Scott, Fla. Comm. Agr. Bien. R. 11,
 193, 1911.
 Watson, Fla. R., 1912, lxii.
 Watson, Fla. Grow., Sept. 27, 1913, 8.
 Watson, Fla. R., 1913, lkv.
- Antidien**
 Smith, N. J. R., 1906, 583.
- Antique tussock moth**, *see* **Notolophus**
antiqua
- Anti-Scale**
 Smith, N. J. R., 1905, 618.
- Antispila nyssaefoliella**
 Felt, N. Y. St. Mus. Mem. 8, 555, 1906.
- Antonina crawi**
 Essig, Cal. Hort. B, II, 1-2, 108, 1913.
- Ants**
 Britton, Conn. R. 11, 316, 1912.
 Conradi, Tex. Stockm. Farm., Mar. 28,
 1906, 2.
 Fernald, Amer. Cult., June 7, 1913, 12.
 Green, Farm & Fireside, May 15, '05, 4.
 Herrick, Rur. N. Y., 1913, 891.
 Herrick, Household Ins. 178, 1914.
 Johnson, Farm. Guide, July 28, 1911, 1.
 Johnson, Deseret Farm., Aug. 19, '11, 40.
 Johnson, S. W. Stockm., July 14, '11, 5.
 Porter, Deseret Farm., Jan. 29, '10, 14.
 Sellards, Fla. R., 1905, 20.
 Slingerland, Rur. N. Y., 1905, 600.
 Slingerland, Rur. N. Y., 1908, 504.
 Smith, N. J. B. 203, 10, 1907.
 Smith, N. J. Ent. C. 36.
 Smith, N. J. R., 1908, 335.
 Surface, Pa. D. A. Zoöl. V, 12, 386, 1908.
 Washburn, Minn. R. 14, 81, 1912.
 Woglum, Cal. Cult. XXXI, 383, 1908.
 ——— C. Gentl., 1906, 592.
 ——— C. Gentl., June 8, 1911, 557.
- Ohio Farm., Sept. 21, 1907, 214.
- Ants and Aphids**
 Felt, N. Y. R. 25, 85, 1910.
 Gossard, O. Farm., May 17, 1913, p.
 658.
- Ants and disease**
 Wheeler, Amer. Jr. Trop. Dis., II, 160,
 1914.
- Ants destroying boll weevil**
 Howard, Tex. Stockm. Farm., Aug. 7,
 1907, 2.
- Ants injuring cartridges**
 Britton, Conn. R. 10, 698, 1911.
- Ants on lawn**
 Bentley, Tenn. Bd. Ent. R. f., 1913, 25.
 Fernald, Amer. Cult., June 14, 1913, 1.
 Surface, Pa. D. A. Zoöl. VII, 2, 60, 1909.
- Anurogryllus muticus**
 Metcalf, N. C. Dept. Agr. Sp. B. 56, '09.
 Sherman, J. Ec. Ent. II, 203, 1909.
- Anystis agilis**
 Ewing, Oreg. B. 121, 62, 1914.
 Johnson, U. S. D. A. B. 19, 33, 1914.
 Reed, Ga. Bd. Ent. B. 29, 20, 1909.
- Aonidiella aurantii**, *see* **Chrysomphalus**
- Apanteles algonquinus**
 Sanderson, U. S. B. 57, 36, 1906.
- Apanteles carduicola**
 Sanderson, U. S. B. 57, 42, 1906.
- Apanteles catalpae**
 Burgess, Ohio Nurs. Orch. Insp. R. 4,
 14, 1906.
 Burgess, U. S. B. 60, 73, 1906.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 51,
 1906.
- Apanteles congregatus**
 Britton, Conn. R. 6, 271, 1907.
 Britton, J. Ec. Ent. III, 434, 1910.
 Britton, Conn. R. 10, 664, 1911.
 Howard & Chittenden, U. S. C. 96, 1907.
 Sanderson, Ins. Pests, 234, 1912.
 Watson, Fla. B. 112, 32, 1912.
 Webster, J. Ec. Ent. V, 471, 1912.
- Apanteles conspersae**
 Howard & Fiske, U. S. B. 91, 285, '11.
- Apanteles flavicombe**
 Wildermuth, U. S. D. A. B. 124, 21, '14.
- Apanteles fulvipes**
 Fiske, Mass. For. R. 6, 90, 1910.
 Howard, U. S. Y. B., 1905, 134.
 Howard & Fiske, U. S. B. 91, 57, *et seq.*,
 1911.

- Apanteles glomeratus**
 Chittenden, U. S. B. 54, 79, 1905.
 Chittenden, U. S. C. 60, 5, 1905.
 Chittenden, Va. Truck Exp. Sta. B. 2, 37, 1909.
 Davis, Ill., Ent. R. 27, 100, 1912.
 Houghton, Del. R. 16-17-18, 89, 1907.
 Matheson, Can. Ent., 1907, 205.
 Sanderson, Ins. Pests, 358, 1912.
- Apanteles hyslopi**
 Hyslop, U. S. B. 95, 116, 1912.
- Apanteles lacteicolor**
 Britton, Conn. B. 182, 20, 1914.
 Britton & Caffey, Conn. R. 13, 222, '14.
 Burgess, U. S. F. B. 564, 6, 1914.
 Howard, U. S. R. Ent., 1911, 9.
 Howard, Mass. For. R. 8, 89, 1912.
 Howard, Mass. For. R. 9, 72, 1912.
 Howard, Mass. For. R. 10, 84, 1913.
 Howard, U. S. R. Ent., 1913, 2.
 Howard, U. S. R. Ent., 1914, 3.
 Howard & Fiske, U. S. B. 91, 262, 278, 1911.
- Apanteles laeviceps**
 Webster, J. Ec. Ent. IV, 181, 1911.
- Apanteles laphygmae**
 Sanderson, U. S. B. 57, 13, 1906.
- Apanteles lunatus**
 Chittenden, U. S. B. 82, 23, 1909.
- Apanteles melanocelis**
 Howard, U. S. R. Ent., 1914, 3.
- Apanteles militaris**
 Garman, Ky. B. 137, 436, 1908.
 Sanderson, U. S. B. 57, 10, 1906.
- Apanteles solitarius**
 Howard, U. S. R. Ent., 1911, 11.
 Howard, U. S. R. Ent., 1912, 9.
 Howard & Fiske, U. S. B. 91, 189, 1911.
- Apanteles sp.**
 Howard & Fiske, U. S. B. 91, 138, 1911.
- Apanteles, sp. on Anthomyia**
 Smith, N. J. R., 1911, 450.
- Apanteles sp. on cutworms**
 Chittenden, U. S. B. 109, 51, 1912.
- Apanteles theclae**
 Sanderson, U. S. B. 57, 40, 1906.
- Apantesis arge**
 Baldwin, Ind. Ent. R. 6, 30, 1914.
 Forbes, Ill. Ent. R. 23, 75, 1905.
 Sanderson, U. S. F. B. 223, 14, 1905.
 Sanderson, U. S. B. 57, 35, 1906.
- Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 14.
- Apantesis phalerata**
 Forbes, Ill. Ent. R. 23, 76, 1905.
- Apantesis phyllira**
 Forbes, Ill. Ent. R. 23, 76, 1905.
- Apatela americana**
 Felt, N. Y. St. Mus. Mem. 8, 525, 1906.
- Apatela funeralis**
 Johannsen, Me. B. 207, 455, 1912.
- Apatela interrupta**
 Gossard, Ohio B. 233, 118, 1911.
- Apatela oblonga**
 Felt, N. Y. St. Mus. Mem. 8, 560, 1906.
 Forbes, Ill. Ent. R. 23, 170, 1905.
 Gossard, Ohio B. 233, 150, 1911.
 O'Kane, Inj. Ins. 275, 1914.
- Apatela populi**
 Forbes, Ill. B. 151, 468, 1911.
 Forbes, Ill. Ent. R. 26, 6, 1911.
- Apatela sp.**
 Swenk, Nebr. Hort. Soc., 1909, 83.
- Apatela superans**
 Gossard, Ohio B. 233, 119, 1911.
- Apatelodes torrefacta**
 Felt, N. Y. St. Mus. Mem. 8, 549, 1906.
- Apatelicus** *see* Podisus
- Aphaenogaster aquia**
 Brooks, W. Va. R. f., 1909-1910, 190.
- Aphaenogaster fulva**
 Smith, N. J. B. 225, 17, 1909.
- Aphaereta pegomyiae**
 Washburn, Minn. R. 12, 131, 1908.
- Aphaereta sp.**
 Chittenden, U. S. B. 66, 96, 1909.
- Aphalara polygoni**
 Johannsen & Patch, Me. B. 195, 235, '11.
- Aphalara veaziei**
 Patch, Me. B. 187, 16, 1911.
- Aphanogmus floridanus**
 McGregor, J. Ec. Ent. VII, 330, 1914.
- Aphanogmus varipes**
 Chittenden, U. S. C. 104, 6, 1909.
- Aphelinus abnormis**
 Quaintance & Sasser, U. S. C. 121, 6, 1910.
- Aphelinus diaspidis**
 Essig, Cal. Hort. B. II, 1-2, 278, 1913.
 Quaintance & Sasser, U. S. C. 121, 6, 1910.
 Quayle, J. Ec. Ent. III, 398, 1910.

- Quayle, Cal. B. 214, 463, 1911.
 Quayle, J. Ec. Ent. IV, 511, 1911.
- Aphelinus fuscipennis**
 Caesar, Ont. Agr. Coll. B. 219, 17, 1914.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 33, 1906.
 Felt, N. Y. Fr. Grow. Assoc., 1914, 164.
 Hayhurst, Ark. B. 107, 376, 1911.
 Marlatt, U. S. B. 62, 58, 1906.
 Quaintance, U. S. C. 124, 10, 1910.
 Quaintance & Sasseer, U. S. C. 121, 6, 1910.
 Quayle, Cal. B. 214, 480, 1911.
 Quayle, J. Ec. Ent. IV, 510, 1911.
 Zimmer, U. S. B. 97, 119, 1912.
- Aphelinus mali**
 Gillette & Taylor, Colo. B. 133, 26, 1908.
 Smith, Nebr. Bd. Agr. R. f., 1908, 322.
 Webster & Phillips, U. S. B. 110, 122, 1912.
- Aphelinus mytilaspidis**
 Caesar, Ont. Agr. Coll. B. 219, 17, 1914.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 33, 1906.
 Essig, Cal. Hort. B. II, 1-2, 277, 1913.
 Hayhurst, Ark. B. 107, 376, 1911.
 Marlatt, U. S. B. 62, 59, 1906.
 Quaintance, U. S. C. 124, 10, 1910.
 Quaintance & Sasseer, U. S. C. 121, 6, 1910.
 Quayle, J. Ec. Ent. IV, 511, 1911.
 Sherman, N. C. Dept. Agr. B. 34, 6, 15, 1913.
 Smith, Nebr. Hort. Soc. B. 20, 8, 1908.
- Aphelinus nigritus**
 Webster, Ann. Ent. Soc. Am. II, 77, '09.
 Webster, U. S. C. 93, rev. 15, 1909.
 Webster & Phillips, U. S. B. 110, 123, 1912.
- Aphelopus sp.**
 Johnson, U. S. D. A. B. 19, 33, 1914.
- Aphidencyrus aphidiphagus**
 Webster & Phillips, U. S. B. 110, 126, 1912.
- Aphides**
 Baldwin, Ind. Ent. R. 6, 31, 1914.
 Beach, Iowa, B. 127, 57, 1912.
 Clarke, Rur. Calif., Oct. 1907, 360.
 Clarke, Rur. Calif., Nov. 1907, 398.
 Gillette, Colo. Fr. Grow., May, 1907, 14.
 Gillette, S. W. Stockm., Apr. 2, '09, 5.
- Gillette & Taylor, S. W. Stockm., Oct. 15, 1909, 1.
 Herrick, N. Y. Fr. Grow. Assoc., 1912, 42.
 Jones, Prai. Farm., Nov. 15, 1914, 23.
 Mathews, Field & Farm., Apr. 25, '08, 5.
 Menges, Pa. R. 19, 355, 1914.
 Morrison, Ind. Ent. R. 5, 198, 1912.
 Pettit, Mich. Farm., 10 Aug. 1912, 109.
 Quaintance, Or. Judd. Farm., Apr. 20, 1907, 551.
 Smith, N. J. B., 181, 5, 1905.
 Smith, Nebr. Bd. Agr. R. f., 1908, 307.
 Smith, N. J. R., 1911, 413.
 Surface, Pa. R. 16, 124, 1910.
 Weiss & Patterson, N. J. C. 15, 25, '12.
 ——— Va. Agr. R. f., 1905, 99.
- Aphidius avenaphis**
 Webster & Phillips, U. S. B. 110, 122, 1912.
- Aphidius confusus**
 Webster & Phillips, U. S. B. 110, 122, 1912.
- Aphidius fletcheri**
 Folsom, Ill. B. 134, 152, 1909.
- Aphidius nigripes**
 Gahan, J. Ec. Ent. IV, 424, 1911.
- Aphidius piceus**
 Herrick, J. Ec. Ent. IV, 222, 1911.
 Herrick & Hungate, N. Y. C. B. 300, 735, 1911.
- Aphidius testaceipes**
 Essig, Pom. Jr. Ent. III, 614, 1911.
 Essig, Cal. Hort. B. I, 7, 292, 1912.
 Essig, Cal. Hort. B. II, 1-2, 264, 1913.
 Sanderson, U. S. B. 57, 27, 1906.
 Sanderson, Ins. Pests, 153, 445, 1912.
 Webster & Phillips, U. S. B. 110, 104, 1912.
- Aphidoletes sp.**
 Webster & Phillips, U. S. B. 110, 133, 1912.
- Aphine**
 Smith, N. J. R., 1908, 366.
 U. S. D. A. Ins. & Fung. Bd. Ins. 6, p. 86, 1914.
- Aphiochaeta albidihalteris**
 Popenoe, U. S. C. 155, 2, 1912.
- Aphiochaeta epeirae**
 Pierce, U. S. B. 100, 48, 1912.
- Aphiochaeta fasciata**
 Pierce, U. S. B. 100, 48, 1912.

Aphiochaeta fungicola

Quaintance & Brues, U. S. B. 50, 126, 1905.

Aphiochaeta nigriceps

Britton & Cromie, Conn. R. 11, 328, '12.
Pierce, U. S. B. 100, 48, 1912.
Quaintance & Brues, U. S. B. 50, 126, 1905.

Aphiochaeta perdita

Wildermuth, U. S. D. A. B. 124, 24, '14.

Aphiochaeta pygmaea

Pierce, U. S. B. 100, 48, 1912.

Aphiochaeta rufipes

Walden, Conn. R. 10, 693, 1911.

Aphiochaeta scalaris

Pierce, U. S. B. 100, 48, 1912.

Aphiochaeta spp.

Hunter & Pierce, U. S. B. 114, 142, 1912.

Aphis abbreviata

Patch, Me. B. 202, 170, 1913.

Aphis angelicae

Wilson, J. Ec. Ent. II, 348, 1909.
— U. S. Y. B., 1908, 578.

Aphis avenae, see Siphocoryne**Aphis bakeri**

Davis, Ann. Ent. Soc. Am. I, 259, 1908.
Gillette, Colo. R. 21, 133, 1908.
Gillette, J. Ec. Ent. I, 364, 1908.
Gillette, J. Ec. Ent. III, 405, 1910.
Gillette & Taylor, Colo. B. 133, 28, 1908.
Johannsen, Me. B. 207, 448, 1912.
O'Kane, Inj. Ins. 317, 1914.
Sanderson, Ins. Pests, 606, 1912.
Stewart, C. Gentl., May 10, 1913, 743.
Webster, J. Ec. Ent. II, 211, 1909.
Wilson, Oreg. Bien. Crop Pest R. f., 1911-1912, 89.

Aphis brassicae

Atkinson, Or. Judd. Farm., June 15, 1907, 759.
Barre & Conradi, S. C. B. 141, 27, 1909.
Bennett, Colo. B. 143, 6, 1909.
Bremner, Cal. Hort. Comm. Destr. Ins. 24, 1910.
Britton & Walden, Conn. R. 13, 233, '14.
Chittenden, Ins. Veg. 151, 1907.
Chittenden, Va. Truck Exp. Sta. B. 2, 22, 1909.
Clarke, Ala. Poly. B. 139, 19, 1907.
Conradi, Tex. B. 89, 11, 1907.
Cooley, Mont. B. 64, 43, 1906.
Cooley, Mont. B. 88, 90, 1912.

Cooley, Mont. B. 92, 57, 1912.

Cooley, Mont. B. 98, 125, 1914.

Corbett, U. S. F. B. 433, 10, 1911.

Davis, J. Ec. Ent. III, 180, 1910.

Davis, Ill. Ent. R. 26, 111, 1911.

Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 110, 1905.

Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 228, 1907.

Essig, Pom. Jr. Ent. III, 523, 1911.

Essig, Cal. Hort. B. II, 1-2, 59, 1913.

Fletcher, Can. Exp. Farms B. 52, 41, 1905.

Fletcher, Ont. Ent. Soc. R. 35, 51, 1905.

Fletcher, Ont. Ent. Soc. R. 36, 86, 1906.

Fulton, Wright & Gregg, Pa. B. 110, 20, 1911.

Garcia, N. Mex. B. 68, 7, 1908.

Gillette, J. Ec. Ent. III, 405, 1910.

Herrick, Rur. N. Y., 1910, 820.

Herrick, J. Ec. Ent. IV, 219, 1911.

Herrick, N. Y. Dept. Agr. B. 28, 72, '11.

Herrick, N. Y. Veg. Grow. Assoc., 1913-1914, 184.

Herrick & Hungate, N. Y. C. B. 300, '11.

Jarvis, Conn. Storrs, B. 56, 247, 1909.

Jordan, N. Y., Geneva B. 393, 653, 1914.

Judson, N. Y. C. B. 292, 259, 1911.

Lewis, Pr. Ga. Hort. Soc. f., 1912, 10.

Lovett, Oreg. Coll. B. 91, 21, 1913.

Morrison, Ind. Ent. R. 5, 218, 1912.

Mundell, Cal. Cult. XXVI, 690, 1911.

Mundell, Farm & Ranch, May 20, 1911, 11.

O'Kane, Inj. Ins. 202, 1914.

Parker, Mont. C. 28, 17, 1913.

Parrott, N. Y. Dept. Agr. B. 62, 1828, 1914.

Pettit, Mich. B. 233, 168, 1906.

Sanborn, Okla. B. 100, 16, 1912.

Sanderson, Ins. Pests, 371, 1912.

Sherman, Prog. Farm., Apr. 14, '05, 4.

Sherman, J. Ec. Ent. II, 202, 1909.

Sherman, N. C. Dept. Agr. B. 32, 7, 1911.

Slingerland & Crosby, N. Y. C. B. 252, 345, 1908.

Slingerland & Crosby, N. Y. C. B. 283, 470, 1910.

Smith, N. C. B. 197, 17, 1908.

Smith, N. C. R. 31, 27, 1908.

Surface, Pa. D. A. Zool. V, 12, 373, 1908.

- Surface, Pa. D. A. Zoöl. I, 1, 21, 1911.
 Surface, Pa. D. A. Zoöl. I, 4, 195, 1911.
 Symons, Md. B. 101, 187, 1905.
 Titus, Deseret Farm., Sept. 12, 1908, 14.
 Woodworth, Cal. Cult. XXX, 83, 1908.
 Woodworth, Pac. Rur. Press, LXXV, 188, 1908.
 Yothers, Cal. Cult., 1914, XLIII, 176.
 ——— U. S. Y. B., 1905, 629.
 ——— U. S. Y. B., 1907, 544.
 ——— U. S. Y. B., 1908, 571.
- Aphis carbocolor**
 Gillette, J. Ec. Ent. I, 178, 1908.
- Aphis cerasifolii**
 Gillette, J. Ec. Ent. III, 405, 1910.
- Aphis citri**
 Essig, Pom. Jr. Ent. I, 47, 1909.
- Aphis cookii**
 Essig, Pom. Jr. Ent. III, 587, 1911.
 Essig, Cal. Hort. B. I, 4, 117, 1912.
 Essig, Cal. Hort. B. II, 1-2, 61, 1913.
- Aphis crataegifoliae**
 Davidson, J. Ec. Ent. III, 377, 1910.
- Aphis fitchii**
 Gossard, Ohio B. 198, 41, 1908.
 Gossard, Ohio B. 233, 109, 1911.
- Aphis forbesi**
 Barre & Conradi, S. C. B. 141, 49, 1909.
 Bentley, Tenn. R. f., 1912, 61.
 Bentley, Tenn. Bd. Ent. R. f., 1912, 7.
 Bentley, Tenn. Bd. Ent. R. f., 1913, 36.
 Close, Ballard & White, Md. B. 160, 219, 1911.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 120, 1913.
 Douglass, Ind. Ent. R. 2, 101, 1910.
 Gillette, J. Ec. Ent. I, 178, 1908.
 Gossard, Ohio B. 198, 75, 1908.
 Gossard, Ohio B. 233, 151, 1911.
 Houghton, Del. C. 2, 1907.
 Moore, Wis. R. 23, 236, 1906.
 Moore, Wis. R. 24, 374, 1907.
 Moore, Wis. B. 190, 31, 1910.
 Morrison, Ind. Ent. R. 5, 219, 1912.
 O'Kane, Inj. Ins. 229, 1914.
 Pettitt, Mich. B. 244, 203, 1907.
 Phillips, Va. Hort. Soc. 13th R. 212, '09.
 Rosenfeld, J. Ec. Ent. III, 215, 1910.
 Sanborn, Okla. B. 100, 53, 1912.
 Sanders, Wis. B. 227, 19, 1912.
 Sanderson, Ins. Pests, 440, 1912.
 Shaw, Ohio Bd. Agr. R. 64, 1909, 631.
- Sherman, N. C. Dept. Agr. B. 34, 8, 21, 1913.
 Slingerland & Crosby, Man. Fr. Ins. 382, 1914.
 Smith, N. J. B. 225, 24, 1909.
 Strickland, Rur. N. Y., 1912, 576.
 Symons, Md. B. 101, 157, 1905.
 Symons & Gahan, Md. Hort. Soc., 1904, 35, 1905.
 Washburn, Minn. R. 12, 144, 1908.
 Whiteside, Mont. Bd. Hort. f., 1907-1908, 44, 1909.
 ——— U. S. Y. B., 1907, 552.
 ——— U. S. Y. B., 1908, 574.
- Aphis gladioli**
 Felt, J. Ec. Ent. I, 330, 1908.
 Felt, N. Y. R. 24, 19, 1909.
 Patch, Me. B. 202, 176, 1913.
 Webster, Can. Ent., 1909, 424.
- Aphis gossypii**
 Barre & Conradi, S. C. B. 141, 32, 38, 1909.
 Bentley, Tenn. Agr., vol. 2, no. 5, 174, 1913.
 Bentley, Tenn. Bd. Ent. R. f., 1913, 35.
 Braunton, Cal. Cult. XXVIII, 105, '07.
 Bremner, Cal. Hort. Comm. Destr. Ins. 22, 1910.
 Britton, Conn. R. 8, 813, 1909.
 Cadwallader, S. W. Stockm., May 21, 1909, 5.
 Chandler, Mo. B. 102, 270, 1912.
 Chittenden, U. S. C. 80, 1, 1906.
 Chittenden, Ins. Inj. Veg. 165, 1907.
 Conradi, U. S. B. 60, 68, 1906.
 Cook, Cal. Hort. I, 2, 64, 1912.
 Davis, J. Ec. Ent. III, 180, 1910.
 Davis, Ill. Ent. R. 26, 120, 1911.
 Davis, Ill. Ent. R. 27, 117, 1912.
 Dean, Kans. Farm., May 24, 1913, 7.
 Dillon, Col. Rur. World, June 5, 1912, 186.
 Durst, Ill. B. 174, 322, 1914.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 228, 1907.
 Essig, Pom. Jr. Ent. II, 223, 1910.
 Essig, Pom. Jr. Ent. III, 590, 1911.
 Essig, Cal. Hort. B. 1, 4, 120, 1912.
 Essig, Cal. Hort. B. II, 1-2, 61, 1913.
 Fulton, Wright & Gregg, Pa. B. 110, 27, 1911.
 Gahan, Md. B. 119, 18, 1907.

***Aphis gossypii* (Cont'd)**

- Garcia, N. Mex. B. 68, 19, 1908.
 Gillette, U. S. B. 52, 60, 1905.
 Gillette, Colo. R. 19, 142, 1906.
 Gillette, J. Ec. Ent. I, 176, 1908.
 Gillette, J. Ec. Ent. III, 404, 1910.
 Glynn, C. Gentl., 1906, 676.
 Green, Nat'l Fr. Grow., July 1905, 10.
 Green, Tex. B. 94, 17, 1907.
 Headlee, Kans. Farm., Aug. 20, '08, 882.
 Howard, U. S. R. Ent., 1906, 8, 22.
 Hunter, U. S. F. B. 344, 39, 1909.
 Hunter, U. S. F. B. 512, 39, 1912.
 Kyle & Conradi, Tex. Stockm. Farm.,
 July 17, 1907, 6.
 Lewis Pr. Ga. Hort. Soc., 1912, 11.
 Lovett, Oreg. Coll. B. 91, 27, 1913.
 Moore, Minn. R. 15, 68, 1914.
 Morrill, S. W. Stockm., Aug. 7, 1914, 8.
 Morrill, Ariz. Comm. Agr. & Hort. R.
 6, 34, 37, 1914.
 Morrison, Ind. Ent. R. 5, 221, 1912.
 O'Kane, Inj. Ins. 199, 1914.
 Pettit, Mich. B. 233, 180, 1906.
 Price, Va. C. 7, 58, 1909.
 Quayle, Cal. B. 214, 493, 1911.
 Reed, Ga. Hort. Soc. f., 1914, 56.
 Rosenfeld, J. Ec. Ent. III, 213, 1910.
 Sanborn, Tex. B. 89, 43, 1907.
 Sanborn, Farm. Guide, Aug. 7, '09, 17.
 Sanborn, Okla. P. B. 171, 1911.
 Sanborn, Okla. P. B. 176, 1911.
 Sanborn, Okla. B. 98, 4, 1912.
 Sanborn, Okla. B. 100, 25, 1912.
 Sanborn, Okla. R. 19 & 20, 45, 1912.
 Sanderson, U. S. F. B. 223, 6, 1905.
 Sanderson, U. S. B. 60, 75, 1906.
 Sanderson, Ins. Pests, 241, 383, 1912.
 Sherman, Prog. Farm., Mar. 14, '05, 2.
 Sherman, N. C. Dept. Agr. B., 29, 6, 14,
 1908.
 Sherman, Prog. Farm., June 25, '08, 15.
 Slingerland, Herrick & Crosby, N. Y.
 C. B. 283, 471, 1910.
 Slingerland & Crosby, N. Y. C. B. 252,
 344, 1908.
 Smith, N. J. Ent. C. 33.
 Smith, Ga. Bd. Ent. B. 16, 52, 1905.
 Smith, Nebr. Ins. Pest Bur. C. 4, 1908.
 Smith, Nebr. Bd. Agr. R. f., 1908, 324.
 Smith, N. J. R. 376, 1909.
 Smith, N. C. B. 197, 40, 1908.

- Smith, N. C. B. 205, 15, 1910.
 Smith, Prog. Farm., July 29, 1911, 634.
 Smith, U. S. B. 67, 101, 1907.
 Smith & Lewis, U. S. B. 60, 81, 1906.
 Swenk, Nebr. Bd. Agr. R. f., 1910, 369.
 Swenk, Nebr. P. B. 34, 1911.
 Swenk, S. W. Stockm., July 11, 1911, 1.
 Symons, Md. B. 101, 182, 1905.
 Thornber, Field & Farm, June 8, 1907, 5.
 Thornber, S. W. Stockm., May 1, '08, 4.
 Tucker, Kans. Farm., July 19, 1906, 748.
 Webster, U. S. F. B. 307, 16, 1907.
 Woodworth, Cal. Cult., XXX, 187, '08.
 Woodworth, Pac. Rur. Press, LXXV,
 172, 1908.
 Woodworth, Cal. Fr. Grow., Feb. 5,
 1910, 9.
 ——— Nebr. Bd. Agr. R. f., '08, 324.
 ——— C. Gentl., 1908, 736.
 ——— Pac. Rur. Press, LXX, 35, 1905.
 ——— Pac. Rur. Press, LXXXI, 311,
 1911.
 ——— U. S. Y. B., 1905, 629, 631.
 ——— U. S. Y. B., 1906, 509, 511.
 ——— U. S. Y. B., 1907, 542, 544.
 ——— U. S. Y. B., 1908, 567, 572.

Aphis grossulariae

- Wilson, Oreg. Bien. Crop Pest R. f.,
 1911-1912, 95.

Aphis hederæ

- Essig, Cal. Hort. B. II, 1-2, 63, 1913.

Aphis houghtonensis

- Troop, Ind. Bd. Agr. R. 54, 488, 1905.
 Troop, Ind. Hort. Soc. f., 1905, 93, 1906.
 Troop, Ind. Bd. Agr. R. 55, 477, 1907.

Aphis maidi-radici

- Chittenden, Ins. Inj. Veg. 189, 1907.
 Davis, Tech. B. 12, pt. 8, U. S. Bur.
 Ent. 123, 1909.
 Davis, J. Ec. Ent. III, 182, 1910.
 Davis, Ill. Ent. R. 27, 120, 1912.
 Dean, Kans. Agr. Educ. I, 4, 6, 1909.
 Felt, N. Y. R. 25, 78, 86, 1910.
 Forbes, U. S. B. 60, 29, 1906.
 Forbes, Or. Judd. Farm., Apr. 6, '07, 470.
 Forbes, Or. Judd. Farm. Apr. 18, '08, 501.
 Forbes, Ill. B. 130, 3, 1908.
 Forbes, J. Ec. Ent. I, 81, 1908.
 Forbes, Ill. Ent. R. 24, 8, 1908.
 Forbes, Ill. Ent. R. 25, 1, 1909.
 Garman, Ky. B. 145, 292, 1909.
 Gillette, J. Ec. Ent. III, 405, 1910.

- Gossard, O. Farm., July 21, 1906, 34.
 Gossard, Ohio B. 198, 35, 1908.
 Gossard, O. Farm., Feb. 20, 1909, p. 223.
 Gossard, Ohio B. 233, 71, 1911.
 Gossard, O. Farm., Aug. 29, '14, p. 156.
 Haseman, Mo. Bd. Agr. R. 44, 271, '12.
 Helmick, Iowa Agric., May, 1914, 462.
 Hobbs, Prog. Farm., Apr. 2, 1910, 300.
 Kohler, Iowa Agric., Nov., 1905, 84.
 Lamson, Iowa Agric., May 1911, 28.
 O'Kane, Inj. Ins. 113, 1914.
 Pettit, Mich. B. 233, 204, 1906.
 Pettit, Mich. B. 258, 290, 1910.
 Popenoe, Kans. Farm., June 14, '06, 675.
 Popenoe, Kans. Farm., June 13, '07, 706.
 Sanderson, Ins. Pests, 164, 1912.
 Sherlock, Wis. Farm., July 20, 1905, 1.
 Sherman, N. C. Dept. Agr. B. 29, 6, 17, 1908.
 Sherman, J. Ec. Ent. II, 203, 1909.
 Sherman, N. C. Dept. Agr. B. 35, 5, 19, 1914.
 Smith, Nebr. Bd. Agr. R. f., '1908, 317.
 Smith, Prog. Farm., Mar. 15, '13, 370.
 Stedman, Mo. Bd. Agr. R. 38, 252, 1906.
 Surface, Pa. D. A. Zoöl. I, 1, 26, 1911.
 Swenk, Nebr. Bd. Agr. R. f., 1910, 365.
 Swenk, Nebr. Ent. B. 1, 72, 1913.
 Symons, Md. B. 101, 160, 1905.
 Thomas, S. C. B. 175, 1914.
 Troop, Ind. Hort. Soc. f., 1906, 122, '07.
 Troop, Ind. Farm., Aug. 10, 1912, 1.
 Vickery, U. S. B. 85, 97, 1910.
 Webster, U. S. C. 86, 4, 1907.
 West, Prai. Farm., Apr. 15, 1908, 6.
 ——— Nebr. Bd. Agr. R. f., 1908, 317.
 ——— Kans. Bd. Agr. Quar. R., v. XXIV, 96, 271, 1905.
 ——— U. S. Y. B., 1905, 634.
 ——— U. S. Y. B., 1906, 510.
 ——— U. S. Y. B., 1907, 543.
 ——— U. S. Y. B., 1908, 573.
- Aphis maidis**
 Davis, Tech. B. 12, pt. 8, U. S. Bur. Ent. 144, 1909.
 Essig, Cal. Hort. B. II, 1-2, 63, 1913.
 Forbes, Ill. Ent. R. 23, 123, 1905.
 Garman, Ky. B. 145, 292, 1909.
 Howard, U. S. R. Ent., 1911, 26.
 O'Kane, Inj. Ins. 198, 1914.
 Patch, Me. B. 202, 173, 1913.
 Pettit, Mich. B. 233, 206, 1906.
- Sanderson, Ins. Pests, 170, 1912.
 Smith, Nebr. Bd. Agr. R. f., 1908, 319.
 Swenk, Nebr. Bd. Agr. R. f., 1908, 319.
 Swenk, Nebr. Bd. Agr. R. f., 1910, 365.
 Swenk, J. Ec. Ent. IV, 286, 1911.
 Swenk, Nebr. Ent. B. 1, 78, 1913.
 Washburn, Minn. P. B. 32, 21, 1908.
 Washburn, Minn. R. 12, 51, 1908.
 Webster, U. S. C. 86, 1, 1907.
 ——— U. S. Y. B., 1905, 631.
 ——— U. S. Y. B., 1908, 570.
- Aphis mali**
 Ball & Titus, Deseret Farm., May 6, 1911, 2.
 Baldwin, Ind. Farm., May 17, 1913, 3.
 Bethune, Ont. Agr. Coll. B. 158, 12, '07.
 Burgess & Collins, U. S. Y. B., 1911, 455.
 Douglass, Ind. Ent. R. 1, 103, 1908.
 Douglass, Ind. Ent. R. 3, 115, 1910.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 108, 1905.
 Felt, N. Y. R. 25, 77, 1910.
 Garman, Ky. B. 133, 51, 1908.
 Gillette, Colo. Fr. Grow., Feb. 1908, 8.
 Gillette, Better Fr. Feb. 1910, 30.
 Herrick, N. Y. Dept. Agr. B. 28, 71, 1911.
 Hitchings, Me. Ent. R. 5, 7, 1910.
 Lamson, Conn. Storrs, B. 71, 66, 1912.
 Lewis, Pr. Ga. Hort. Soc., 1907, 120.
 Moore, Wis. R. 23, 234, 1906.
 Moore, Wis. B. 190, 21, 1910.
 Murtfeldt, J. Ec. Ent. II, 219, 1909.
 Pettit, Mich. Farm., July 27, 1907, 55.
 Quaintance, Pr. Ent. Soc. Wash. IX, 43, 1907.
 Quaintance, U. S. C. 81, 5, 1907.
 Rosenfeld, La. Hort. Soc., 1908, 107.
 Rumsey, U. S. B. 67, 33, 1907.
 Smith, Ga. Bd. Ent. B. 20, 167, 1906.
 Smith, U. S. B. 67, 104, 1907.
 Venable, Pr. Ent. Soc. B. C., 2, 11, '12.
 Weldon, Md. Hort. Soc., 1907, 64, 1908.
 ——— Pac. Rur. Press, LXXI, 294, '06.
- See also *A. pomi*.
- Aphis malifoliae**
 Bethune, Ont. Agr. Coll. B. 158, 12, '07.
 Britton, Conn. R. 9, 343, 1910.
 Felt, N. Y. R. 25, 77, 1910.
 Herrick, N. Y. Dept. Agr. B. 28, 72, 1911.
 Quaintance, U. S. C. 81, 7, 1907.
 Volck, Better Fr., Jan. 1913, 27.

Aphis medicaginis

- Chittenden, U. S. B. 64, 40, 1908.
 Gillette, J. Ec. Ent. I, 177, 1908.
 Gillette & Taylor, Colo. B. 133, 32, 1908.
 Sanderson, U. S. B. 57, 26, 1906.
 Sanderson, Ins. Pests, 241, 1912.

Aphis middletoni

- Vickery, U. S. B. 85, 113, 1910.

Aphis neri

- Essig, Pom. Jr. Ent. III, 530, 1911.
 Essig, Cal. Hort. B. II, 1-2, 66, 1913.

Aphis oenotheriae

- Gillette, J. Ec. Ent. I, 178, 1908.

Aphis persicae-niger

- Ball & Titus, Deseret Farm., May 6, 1911, 2.
 Becker, Proc. Ark. Hort. Soc., 1912-1913, 30.
 Bentley, Tenn. Bd. Ent. R. f., 1913, 28.
 Bremner, Cal. Hort. Comm. Destr. Ins. 21, 1910.
 Burgess, Ohio Bd. Agr. R. 60, 659, 1906.
 Burgess, Ohio Nurs. Orch. Insp. R. 5, 19, 1907.
 Close & Ballard, Md. B. 159, 188, 1911.
 Cooper, Cal. Hort. Comm. Ins. & Insect., 10, 1905.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 70, 1913.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 109, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 228, 1907.
 Essig, Cal. Cult., XXXVI, 639, 1911.
 Essig, Cal. Hort. B. II, 1-2, 66, 1913.
 Garcia, N. Mex. B. 68, 39, 1908.
 Gillette, U. S. B. 52, 59, 1905.
 Gillette, Colo. R. 20, 25, 1907.
 Gillette, J. Ec. Ent. I, 308, 1908.
 Gillette & Taylor, Colo. B. 133, 37, 1908.
 Gillette & Taylor, Colo. B. 134, 12, 1908.
 Gillette & Taylor, Better Fr., Apr. 1909, 18.
 Gillette & Weldon, Colo. B. 169, 20, '10.
 Gossard, Ohio B. 198, 63, 1908.
 Haseman, Mo. Hort. Soc., 1911, 255.
 Jones, Cal. Cult., XXXVIII, 678, 1912.
 Morrison, Ind. Ent. R. 5, 225, 1912.
 O'Kane, Inj. Ins. 229, 320, 1914.
 Quaintance, U. S. Y. B., 1905, 342.
 Quaintance, Mich. Hort. Soc., 1905-1906, 123, 1907.

Quaintance, Pr. Ent. Soc. Wash. IX, 43, 1907.

Quaintance, Better Fr., June, 1909, 19.

Quayle, Cal. Cult. XXXIV, 518, 1910.

Sanderson, Ins. Pests, 655, 1912.

Sherman, Prog. Farm., Apr. 19, 1913, 532.

Slingerland & Crosby, Man. Fr. Ins. 289, 1914.

Smith, Ga. Bd. Ent. B. 17, 101, 1905.

Smith, N. J. R., 1908, 318.

Smith, N. J. B. 235, 32, 1911.

Smith, U. S. B. 67, 103, 1907.

Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 13.

Stewart, C. Gentl., May 10, 1913, 743.

Surface, Pa. D. A. Zoöl. V, 12, 391, 1908.

Surface, Pa. D. A. Zoöl. I, 1, 23, 1911.

Surface, Pa. D. A. Zoöl. I, 4, 163, 1911.

Symons, Md. B. 101, 144, 1905.

Williams & Price, Ala. Poly. B. 156, 123, 1911.

Wilson, Oreg. Bien. Crop Pest R. f., 1911-1912, 93.

Woodworth, Cal. Cult. XXVI, 662, '11.

— Cal. Fr. Grow., June 5, 1909, 1.

Aphis pomi

Alderman, Giddings & Rumsey, W. Va. C. 7, 30, 1913.

Baldwin, Farm. Guide, Jan. 31, 1914, 16.

Barre & Conradi, S. C. B. 141, 22, 1909.

Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 53.

Bentley, Tenn. Bd. Ent. R. f., 1913, 27.

Brenner, Cal. Hort. Comm. Destr. Ins. 23, 1910.

Brittain, Pr. Ent. Soc. B. C., 4, 16, 1914.

Brown, Nat'l Fr. Grow., Jan. 1910, 6.

Burgess, Ohio Bd. Agr. R. 61, 657, 1906.

Burgess, Ohio Nurs. Orch. Insp. R. 5, 17, 1907.

Chase, Ga. Bd. Ent. B. 38, 27, 1913.

Clarke, Cal. Hort. Comm. Bien. R. 1, 376, 1905.

Clinton & Britton, Conn. R. f., 1909-1910, 595, 1911.

Conradi & Thomas, S. C. B. 143, 32, '09.

Cooley, Mont. B. 88, 89, 1912.

Cooley, Mont. B. 92, 56, 1912.

Cooley, Mont. B. 98, 124, 1914.

Cooley & Swingle, Mont. C. 17, 123, '12.

Davis, U. S. D. A. B. 112, 4, 1914.

- Dean & Peairs, Kans. Agr. Educ. VI, 2, 51, 1913.
- Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 227, 1907.
- Essig, Cal. Hort. B. II, 1-2, 67, 1913.
- Felt, J. Ec. Ent. II, 306, 1909.
- Gardner, Me. Comm. Agr. R., 1913, 59, 1914.
- Gillette, U. S. B. 52, 59, 1905.
- Gillette, Colo. B. 114, 8, 1906.
- Gillette, Colo. Fr. Grow., Apr. 1907, 3.
- Gillette, Farn. Guide, May 30, 1908, 22.
- Gillette, J. Ec. Ent. I, 303, 1908.
- Gillette, J. Ec. Ent. III, 404, 1910.
- Gillette & Taylor, Colo. B. 133, 23, 1908.
- Gillette & Taylor, Colo. B. 134, 11, 1908.
- Gillette & Taylor Better Fr., Apr. '09, 17.
- Gillette & Taylor, Colo. Fr. Grow., Apr. 1909, 7.
- Gillette, Better Fr., Feb. 1910, 17.
- Gossard, Ohio B. 198, 41, 1908.
- Gossard, Ohio B. 233, 109, 1911.
- Gossard, Ohio P. B. 241, 1912.
- Gossard, Ohio, Hort. Soc., 1913, 48.
- Hitchings, Me. Comm. Agr. R., 1907, 303, 1908.
- Hitchings, Me. Dept. Agr. Quar. B. vol. VII, 1, 35, 1908.
- Hitchings, Me. Ent. R. 3, 99, 1908.
- Hitchings, Me. Comm. Agr. R., 1910, 50, 1911.
- Hitchings, Me. Ent. R. 6, 8, 1911.
- Hodgkiss & Fulton, N. Y. St. C. 23, '13.
- Hunter, Kans. Hort. Soc., 1910, 49.
- Johannsen & Patch, Me. Comm. Agr. R. f., 1910, 336.
- Johannsen & Patch, Me. B. 195, 235, 1911.
- Lewis, Ga. Bd. Ent. B. 25, 121, 1907.
- Lewis, Ga. Bd. Ent. B. 30, 23, 1909.
- Lochhead, Ont. Agr. Coll. B. 144, 31, '05.
- Lochhead, Ont. Ent. Soc. R. 40, 68, 1910.
- Moore, Wis. B. 207, 26, 1911.
- Morgan, Tenn. Bd. Ent. R. f., 1910, 50.
- Morrison, Ind. Ent. R. 5, 225, 1912.
- O'Kane, Inj. Ins. 316, 1914.
- Paull, Colo. Fr. Grow., July 1907, 6.
- Petch, Ont. Ent. Soc. R. 43, 73, 1913.
- Sanderson, N. H. R. 17-18, 335, 1906.
- Sanderson, N. H. C. 3, 1908.
- Sanderson, J. Ec. Ent. III, 210, 1910.
- Sanderson, Ins. Pests, 597, 1912.
- Slingerland & Crosby, Man. Fr. Ins. 147, 1914.
- Smith, Ga. Bd. Ent. B. 23, 41, 1907.
- Smith, N. C. B. 206, 65, 1910.
- Smith & Lewis, U. S. B. 60, 79, 1906.
- Stewart, C. Gentl., May 10, 1913, 743.
- Swaine, Ont. Ent. Soc. R. 41, 94, 1911.
- Symons, Md. B. 101, 137, 1905.
- Taylor, Colo. B. 119, 12, 1906.
- Taylor, Colo. Fr. Grow., Mar. 1907, 14.
- Treherne, Pr. Ent. Soc. B. C. 4, 24, 1914.
- Weldon, Colo. R. 22, 31, 1909.
- Wilson, Oreg. Circ. B. 12, 4.
- Wilson, Oreg. Bien. Crop Pest R. f., 1911-1912, 86.
- Worsham, J. Ec. Ent. II, 208, 1909.
- C. Gentl., 1907, 658.
- Aphis populifoliae**
Patch, Me. B. 213, 82, 1913.
- Aphis pruni**
Wilson, Oreg. Bien. Crop. Pest R. f., 1911-1912, 91.
- Aphis prunifoliae**
Brenner, Cal. Hort. Comm. Destr. Ins. 23, 1910.
- Cooper, Cal. Hort. Comm. Ins. & Insect., 10, 1905.
- Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 109, 1905.
- Essig, Cal. Hort. B. II, 8, 624, 1913.
- Gillette, U. S. B. 52, 58, 1905.
- Haseman, Mo. Hort. Soc., 1911, 251.
- Murtfeldt, J. Ec. Ent. II, 219, 1909.
- Aphis pseudobrassicæ**
Ashburn, Farm & Ranch, Dec. 19, 1914, 10.
- Aphis pyri**
Britton, Conn. R. 9, 343, 1910.
- Gillette & Taylor, Colo. B. 133, 31, 1908.
- Johannsen & Patch, Me. Comm. Agr. R. f., 1910, 337.
- Lamson, Conn. Storrs B. 71, 67, 1912.
- Aphis rufomaculata**
Davis, Ill. Ent. R. 27, 116, 1912.
- Aphis rumicis**
Bethune, Ont. Agr. Coll. B. 171, 13, '09.
- Fletcher, Can. Exp. Farms B. 52, 27, 1905.
- O'Kane, Inj. Ins. 201, 1914.
- Patch, Me. B. 202, 177, 1913.
- Sanborn, Okla. R. 21, 27, 1912.

- Sanderson, Ins. Pests, 317, 1912.
 ——— U. S. Y. B., 1908, 570.
- Aphis salicicola**
 Gillette, J. Ec. Ent. III, 403, 1910.
 Patch, Me. B. 213, 81, 1913.
- Aphis scottii** *see* A. setariae
- Aphis sedi**
 Patch, Me. B. 187, 22, 1911.
- Aphis setariae**
 Conradi & Thomas, S. C. B. 143, 29, '09.
 Felt, C. Gentl., 1909, 616.
 Gillette & Taylor, Colo. B. 133, 41, '08.
 Gillette & Taylor, Colo. B. 134, 13, '08.
 Gillette & Taylor, Better Fr. Apr., 1909, 19.
 O'Kane, Inj. Ins. 321, 1914.
 Sanborn, Okla. B. 88, 3, 1910.
 Sanderson, J. Ec. Ent. III, 210, 1910.
 Sanderson, Ins. Pests, 665, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 259, 1914.
 Smith, Ga. Bd. Ent. B. 17, 99, 1905.
 Webster, J. Ec. Ent. II, 463, 1909.
 Webster, J. Ec. Ent., III, 503, 1910.
 ——— U. S. Y. B., 1905, 632.
 ——— U. S. Y. B., 1906, 513.
- Aphis sorbi**
 Baldwin, Farm. Guide, Jan. 31, '14, 16.
 Brittain, Pr. Ent. Soc. B. C., 4, 16, 1914.
 Britton, Conn. R. 9, 343, 1910.
 Caesar, Ont. Ent. Soc. R. 43, 77, 1913.
 Clark, Cal. Hort. Comm. Bien. R. 1, 377, 1905.
 Clinton, & Britton, Conn. R. f., 1909-1910, 595, 1911.
 Davis, U. S. D. A. B. 112, 4, 1914.
 Essig, Cal. Hort. B. II, 1-2, 70, 1913.
 Gillette, J. Ec. Ent. III, 404, 1910.
 Gossard, Ohio B. 198, 41, 1908.
 Gossard, Ohio B. 233, 109, 1911.
 Hodgkiss & Fulton, N. Y. St. C. 23, '13.
 Morrison, Ind. Ent. R. 5, 228, 1912.
 O'Kane, Inj. Ins. 317, 1914.
 Sanderson, Ins. Pests, 602, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 149, 1914.
 Stewart, C. Gentl., May 10, 1913, 743.
 Swaine, Ont. Ent. Soc. R. 41, 94, 1911.
 Treherne, Pr. Ent. Soc. B. C., 4, 23, '14.
 Volck, Pac. Rur. Press 1911, LXXXI, 272.
 Walden, Conn. R. 10, 690, 1911.
- Wilson, Oreg. B. 12, 5.
 Wilson, Oreg. Bien. Crop Pest R. f., 1911-1912, 82.
 Wilson, Better Fr., June 1913, 17.
- Aphis sp.**
 Gillette, Conn. Farm., July 1, 1911, 6.
 Jarvis, Conn. Storrs B. 6, 254, 1911.
 Sanders, Wis. B. 227, 18, 1912.
- Aphis viburni**
 Swenk, Nebr. Hort. Soc., 1909, 104.
- Aphis on apple**
 Brittain, Can. Hort. XXXVII, 59, 123, 1914.
 Bremner, Cal. Hort. B. III, 11, 480, 1914.
 Brown, Va. Hort. Soc. 17th R. 273, 1913.
 Herrick, Rur. N. Y., 1910, 260.
 Herrick, N. Y. Fr. Grow. Assoc., '13, 38.
 Lochhead, Syn. Ec. Ent. 45, 1914.
 Parrott, N. Y. Dept. Agr. B. 50, 1745.
 Parrott, N. Y. Fr. Grow. Assoc., 1913, 44, 255.
 Parrott, N. Y. Dept. Agr. B. 62, 1830, 1914.
 Schoene, Va. Hort. Soc. 18th R., 91, 1914.
 Smith, N. J., Ent. C, 32.
 Symons & Cory, Md. B. 175, 173, '13.
 Volck, Cal. Cult., XXXVI, 454, 1911.
- Aphis on buds**
 Gardner, Oreg. B. 116, 33, 1913.
- Aphis on cherry**
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 471, 1910.
- Aphis on peach**
 Gillette, Better Fr., June 1911, 31.
- Aphis on peanut**
 Beattie, U. S. F. B. 431, 37, 1911.
- Aphis on potato**
 Caesar, Farm. Advocate, Can., '10, 830.
 Patch, Me. B. 134, 216, 1906.
- Aphis on sugar cane**
 Holloway, U. S. C. 171, 6, 1913.
- Aphis on walnut**
 Smith, Hunt & Nixon, Cal. C. 107, 1913.
 Smith, Hunt & Ramsey, Cal. B. 231, 383, 1912.
- Aphis eggs and sprays**
 Hodgkiss U. S. B. 67, 29, 1907.
- Aphisicide**
 U. S. D. A. Ins. & Fung. Bd. Ins. 1, p. 11, 1914.

- Aphodius granarius**
Forbes, Ill. Ent. R. 23, 183, 1905.
Swenk, Nebr. Bd. Agr. R. f., 1909, 245.
- Aphodius inquinatus**
Troop, Farm. Guide, Nov. 27, 1909, 2.
- Aphonus tridentatus**
Forbes, Ill. Ent. R. 23, 184, 1905.
- Aphrastus taeniatus**
Felt, N. Y. St. Mus. Mem. 8, 515, 1906.
- Aphrophora parallela**
Felt, N. Y. St. Mus. Mem. 8, 686, 1906.
Patch, Me. B. 162, 363, 1908.
Sanderson, J. Ec. Ent. III, 210, 1910.
Smith, N. J. R., 1906, 531.
- Aphrophora saratogensis**
Felt, N. Y. St. Mus. Mem. 8, 686, 1906.
Hitchings, Me. Ent. R. 4, 5, 1909.
- Aphrophora spp.**
Gibson, Ont. Ent. Soc. R. 43, 18, 1913.
Jarvis, Ont. Ent. Soc. R. 37, 56, 1907.
—— C. Gentl., 1905, 669.
—— C. Gentl., 1906, 615.
- Aphycus cognatus**
Symons & Cory, Md. B. 149, 87, 1910.
- Aphycus flavus**
Essig, Cal. Hort. B. II, 1-2, 273, 1913.
Quayle, Cal. B. 214, 476, 1911.
Quayle, Cal. B. 223, 190, 1911.
Quayle, J. Ec. Ent. IV, 512, 1911.
- Aphycus immaculatus**
Essig, Cal. Hort. B. II, 1-2, 274, 1913.
Quayle, Cal. B. 222, 138, 1911.
Quayle, J. Ec. Ent. IV, 511, 1911.
- Aphycus lounsburyi**
Carnes, Cal. Cult. XXXVI, 709, 1911.
- Aphycus pulvinariae**
Cotton, Ohio Nurs. Orch. Insp. B. 7, 35, 1906.
Johnson, Colo. B. 116, 11, 1906.
Sanders, U. S. C. 64, 4, 1905.
- Aphycus sp. on soft scale**
Timberlake, J. Ec. Ent. VI, 294, 1913.
- Aphycus stomachosus**
Symons & Cory, Md. B. 149, 87, 1910.
- Apiomerus spissipes**
Hunter & Pierce, U. S. B. 114, 137, 1912.
Morgan, U. S. B. 63, 49, 1907.
- Apion colon**
Chittenden, U. S. B. 64, 30, 1908.
- Apion decoloratum**
Pierce, U. S. B. 73, 45, 1908.
Pierce, U. S. B. 100, 75, 1912.
- Apion griseum**
Chittenden, U. S. B. 64, 29, 1908.
Pierce, U. S. B. 73, 45, 1908.
Pierce, U. S. B. 100, 75, 1912.
- Apion nigrum**
Cotton, Ohio Nurs. Orch. Insp. B. 7, 23, 1906.
Pierce, U. S. B. 100, 75, 1912.
- Apion rostrum**
Pierce, U. S. B. 100, 75, 1912.
- Apion segnipes**
Pierce, U. S. B. 100, 75, 1912.
- Apion spp.**
Chittenden, U. S. B. 64, 31, 1908.
- Apocellus sphaericollis**
Chittenden, Florists' Exch., Dec. 6, 1913, 1216.
—— U. S. Y. B., 1905, 636.
- Apple aphid, see Aphis pomi, mali, and sorbi**
- Apple curculio, see Anthonomus quad-rigibbus**
- Apple-fruit maggot, see Rhagoletis pom-onella**
- Apple insects**
Burgess, Ohio Bd. Agr. R. 60, 606, '05.
Chandler, Mo. Hort. Soc., 1909, 350.
Clay, Tex. Agr. & Statis. R., 1905, 262.
Cooley, Mont. Hort. Soc., 1909, 65.
Cordley, Oreg. Bd. Hort. 9th Bien. R. 64.
Daey, W. Va. R. 136, 199, 1912.
Douglass, Ind. Ent. R. 3, 97, 1910.
Felt, Gard. Mag. Feb., 1906, 36.
Funk, Pa. Dept. Agr. B. 152, 209, 1907.
Garman, Ky. B. 133, 14, 1908.
Gillette, Colo. B. 114, 6, 1906.
Haseman, Mo. Hort. Soc., 1911, 230.
Herrick, N. Y. Dept. Agr. B. 28, 71, '11.
Hitchings, Me. Comm. Agr. R., 1909, 287, 1910.
Johannsen & Patch, Me. Comm. Agr. R. f., 1910, 321.
Lewis, Ga. Bd. Ent. B. 30, 21, 1909.
Lewis, Pr. Ga. Hort. Soc., 1909, 21.
Miller, N. Eng. Farm., Aug. 21, '09, 7.
Miller, N. Eng. Farm., Aug. 28, '09, 7.
Munson, W. Va. B. 121, 359, 1909.
Munson, W. Va. R. f., 1909-1910, 86.
Parrott, N. Y. Dept. Agr. B. 50, 1732, 1913.
Quaintance & Scott, U. S. F. B. 492, 5, 1912.

Apple insects (Cont'd)

- Schoene & Fulton, N. Y. St. C. 25, '13.
 Smith, N. C. B. 206, 1910.
 Stene, R. I. Bd. Agr. R. 25, 145, 1910.
 Stone & Fernald, Mass. B. 123, 16, '08.
 Surface, Pa. D. A. Zoöl. V, 12, 365, 1908.
 Surface, Pa. Hort. Assoc. R. f., 1908, 34.
 Surface, Pa. D. A. Zoöl. II, 6, 217, 1912.
 Volck, Kans. Hort. Soc. 1909, 308.
 Volck, Cal. Fr. Grow., Jan. 8, 1910, 4.
 Volck, Pac. Rur. Press, LXXIX, 124, 144, 164, 1910.
 Weed, Nat'l Stockm. & Farm., July 6, 1911, 10.
 ——— Pa. Dept. Agr. R. 13, 496, 1907.
Apple-leaf bucculatrix, *see* **Bucculatrix pomifoliella**
Apple-leaf flea-weevil, *see* **Orchestes pallicornis**
Apple leaf-hopper, *see* **Empoasca mali**
Apple leaf roller, *see* **Acleris**
Apple leaf-miner, *see* **Tischeria malifoliella**
Apple leaf-sewer, *see* **Ancylys nubeculana**
Apple-leaf skeletonizer, *see* **Canarsia hammondi**
Apple leaf trumpet miner, *see* **Tischeria malifoliella**
Apple maggot, *see* **Rhagoletis pomonella**
Apple miner, peculiar
 Felt, N. Y. R. 27, 101, 1912.
Apple miner under skin
 Wilson, Oreg. Bien. Crop Pest R. f., 1913-14, 200.
Apple red bug, *see* **Heterocordylus malinus** and **Lygidea mendax**
Apple tree borers
 Evans, O. Farm. Dec. 8, 1906, 440.
 Slingerland, Rur. N. Y., 1905, 536.
 Smith, N. J. R., 1906, 520.
Apple-tree bucculatrix, *see* **Bucculatrix pomifoliella**
Apple-tree pruner, *see* **Elaphidion villosum**
Apple-tree tent-caterpillar, *see* **Malacosoma americana**
Apple twig-beetle, *see* **Stephanoderes hispidulus**
Apple twig-borer, *see* **Amphicerus bicaudatus**
Apple worm, *see* **Carpocapsa pomonella**
Apricot leaf-weevil, *see* **Paratochus sellatus**
Apricot scale, *see* **Eulecanium armeniacum**

Aprostocetus diplosidis

Dean, J. Ec. Ent. III, 206, 1910.

Dean, U. S. B. 85, 55, 1911.

Apterite

Smith, N. J. R., 1909, 389.

Araecerus fasciculatus

Brown, Jr., N. Y. Ent. Soc. XIV, 116, 1906.

Herrick, Household Ins. 271, 1914.

Pierce, U. S. B. 100, 74, 1912.

Tucker, J. Ec. Ent. II, 272, 1909.

Tucker, U. S. B. 64, 61, 1909.

Tucker, Can. Ent., 1911, 23.

Aramigus fulleri

Chittenden, Florists' Exch., Dec. 3, 1910, 1004.

Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 120, 1905.

Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 22, 1907.

Essig, Cal. Hort. B. II, 1-2, 240, 1913.

Essig, Cal. Hort. B. II, 11, 724, 1913.

Felt, N. Y. Fr. Grow. Assoc., 1906, 122.

Jeffrey, Cal. Hort. Comm. Bien. R. 1, 164, 1905.

Maskew, U. S. B. 54, 70, 1905.

Quaintance & Jenne, U. S. B. 103, 29, 1912.

Quayle, Cal. B. 214, 499, 1911.

Slingerland & Crosby, Man. Fr. Ins. 389, 1914.

Surface, Pa. Dept. Agr. R. 13, 501, '07.

——— Pac. Rur. Press, LXXXVI, 267, 411, 1913.

——— U. S. Y. B., 1908, 578.

Arbolineum

Walden, Conn. R. 10, 692, 1911.

Archasia galeata

Felt, N. Y., St. Mus. Mem. 8, 597, 1906.

Archips argyrospila

Brittain, Pr. Ent. Soc. B. C. 4, 15, 1914.

Davidson, J. Ec. Ent. VI, 396, 1913.

Felt, N. Y. St. Mus. Mem. 8, 531, 1906.

Gill, U. S. B. 116, 91, 1913.

Gillette, Colo. B. 114, 7, 17, 1906.

Gillette, Better Fr., Feb. 1910, 16.

Gillette, Colo. R. 24, 30, 1911.

Gillette, Colo. R. 26, 9, 1913.

Gillette, Colo. Bd. Hort. R. f., 1912, 134, 1913.

Gillette & Weldon, Colo. C. 5, Oct., '12.

Haseman, Mo. Hort. Soc., 1911, 243.

- Herrick, N. Y. Fr. Grow. Assoc., '12, 44.
 Herrick, Pr. N. Y. Fr. Grow. Assoc., 11 Meet., 44, 1912.
 Herrick, Pr. West. N. Y. Hort. Soc., 57 Meet., 49, 1912.
 Herrick, N. Y. Fr. Grow. Assoc., 1914, 25.
 Herrick, N. Y. C. B. 311, 279, 1912.
 Moore, Wis. B. 190, 19, 1910.
 O'Kane, Inj. Ins. 302, 1914.
 Schoene & Fulton, N. Y. St. C. 25, 2, 1913.
 Slingerland & Crosby, Man. Fr. Ins. 62, 1914.
 Stedman, Mo. B. 71, 4, 1906.
 Taylor, Colo. Bd. Hort. R. f., 1912, 136, 1913.
 Weldon, Colo. R. Bd. Hort. f., 1911, 75.
 Weldon, Cal. Hort. B. II, 9, 637, 1913.
 Weldon, S. W. Stockm., Oct. 10, '13, 10.
 Weldon, Cal. Hort. B. III, 7, 285, 1914.
 Wilson, The Ranch, Dec. 15, 1913, 5.
 Wilson, Better Fr., Mar. 1914, 49.
 Wilson, Oreg. Bien. Crop Pest R. f., 1913-1914, 109.
- Archips cerasivorana**
 Bailey, Vt. Agr. R. 5, 31, 1913.
 Bailey, Vt. Agr. R. 6, 43, 1914.
 Britton, Conn. R. 11, 309, 1912.
 Cooley, Mont. B. 92, 59, 1912.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 85, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 552, 1906.
 Herrick, N. Y. C. B. 311, 290, 291, 1912.
 Patch, Me. B. 123, 214, 1905.
 Patch, Me. B. 148, 264, 1907.
 Slingerland & Crosby, Man. Fr. Ins. 309, 1914.
 ——— U. S. Y. B., 1907, 547.
- Archips fervidana**
 Felt, N. Y. St. Mus. Mem. 8, 530, 1906.
 Gibson, Ont. Ent. Soc. R. 39, 116, 1909.
 Patch, Me. B. 148, 265, 1907.
 Weiss, N. J. R., 1912, 427.
- Archips georgiana**
 Hardenberg, Wis. B. 159, 17, 1908.
- Archips negundana**
 Gillette & Weldon, Colo. C. 5, Oct., '12.
 Gillette, Colo. R. Bd. Hort. f., 1909, 147.
- Archips obsoletana**
 Douglass, Ind. Ent. R. 2, 65, 1910.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 118, 1905.
- Gossard, Ohio B. 233, 148, 1911.
 Slingerland & Crosby, Man. Fr. Ins. 364, 1914.
- Archips parallela**
 Washburn, Minn. Ent. R. 13, 108, 1910.
- Archips purpurana**
 Gibson, Ont. Ent. Soc. R. 36, 122, 1906.
- Archips rosaceana**
 Bethune, Ont. Agr. Coll. B. 158, 11, '07.
 Caesar, Ont. Ent. Soc. R. 42, 29, 1912.
 Cooley, Mont. B. 92, 59, 1912.
 Cooley, Mont. B. 98, 126, 1914.
 Crandall, Ill. Hort. Soc. f., 1911, 340, '12.
 Davis, Ill. Hort. Soc. f., 1910, 39, 1911.
 Davis, Ill. Ent. R. 27, 90, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 580, 1906.
 Garman, Ky. B. 133, 27, 1908.
 Gibson, Ont. Ent. Soc. R. 36, 116, 1906.
 Gossard, Ohio B. 198, 43, 1908.
 Hardenberg & Malde, Wis. R. 24, 312, '07.
 Hardenberg & Malde, Wis. Cran. Grow. Assoc., 21st Meet., 12, 1908.
 Herrick, N. Y. C. B. 311, 289, 1912.
 Hitchings, Me. Comm. Agr. R., 1907, 302, 1908.
 Hitchings, Me. Dept. Agr. Quar. B., vol. VII, i, 35, 1908.
 Hitchings, Me. Ent. R. 3, 98, 1908.
 Johannsen & Patch, Me. B. 195, 239, '11.
 Lochhead, Syn. Ec. Ent. 54, 1914.
 O'Kane, Inj. Ins. 188, 302, 1914.
 Sanderson & Jackson, J. Ec. Ent. II, 391, 1909.
 Schoene & Fulton, N. Y. St. C. 25, 2, '13.
 Slingerland & Crosby, Man. Fr. Ins. 65, 1914.
 Treherne, Pr. Ent. Soc. B. C., 4, 32, '14.
- Archips rosana**
 Felt, N. Y. St. Mus. Mem. 8, 581, 1906.
 Weldon, Conn. R. 13, 223, 1914.
 Wilson, Oreg. Bien. Crop Pest. R. f., 1911-1912, 156.
- Archips sorbiana**
 Felt, N. Y. R. 23, 45, 1908.
- Archips sp.**
 Cooper, Cal. Hort. Comm. Ins. & Insect, 1905, 14.
 Hardenberg, Wis. B. 159, 15, 1908.
 Parrott, N. Y. Dept. Agr. B. 50, 1747.
 Weldon, Colo. Bd. Hort. R. f., 1911, 75, 1912.

- Weldon, Colo. Bd. Hort. R. f., 1912, 42, 1913.
- Archytas aterrima**
Davis, Ill. Ent. R. 27, 86, 1912.
- Archytas piliventris**
Quaintance & Brues, U. S. B. 50, 123, 1905.
- Arctaphis sp. on cottonwood**
Cooley, Mont. B. 88, 89, 1912.
Cooley, Mont. B. 92, 57, 1912.
- Argas americana**
Basley, Cal. Cult., XXVI, 398, 1906.
- Argas miniatus**
Banks, U. S. C. 92, 4, 1907.
Bishopp, U. S. C. 170, 1, 1913.
Carnes, Cal. Hort. B. I, 4, 136, 1912.
Cary, Ala. Poly. B. 141, 145, 1907.
Ewing, Oreg. Coll. B. 92, 6, 1913.
Hayhurst, Farm & Ranch, Aug. 27, 1910, 15.
Hooker, Pr. Ent. Soc. Wash. XI, 109, 1909.
Hooker, Bishopp & Wood, U. S. B. 106, 46, 1912.
Hunter & Bishopp, U. S. Y. B. '10, 220.
Hunter & Hooker, U. S. B. 72, 42, 1907.
James, Pac. Rur. Press, LXXVIII, 76, 1909.
Mohler, U. S. B. An. Ind. B. 78, '05, 15.
Mohler, U. S. F. B. 258, 17, 1906.
Mohler, U. S. F. B. 569, 10, 1914.
Moore, Farm & Ranch, Apr. 22, '11, 15.
Scholl, Farm & Ranch, Sept. 4, '09, 14.
Scholl, Farm & Ranch, Apr. 5, '13, 23.
Scholl, Tex. Stockm. Farm., Sept. 22, 1909, 6.
Cal. Cult. XXXV, 134, 1910.
——— Pac. Rur. Press, LXXIII, 403, 1907.
——— U. S. Y. B., 1907, 552.
——— U. S. Y. B., 1908, 580.
- Argas persicus** *see* **miniatus**
- Argas sanchezi**
Hunter & Hooker, U. S. B. 72, 42, 1907.
- Argentine ant**, *see* **Iridomyrmex humilis**
- Argopsylla gallinacea**, *see* **Sarcopsylla**
- Argus tortoise beetle**, *see* **Chelymophra argus**
- Argyresthia conjugella**
Quaintance, Pr. Ent. Soc. Wash. X, 122, 1909.
- Slingerland & Crosby, Man. Fr. Ins. 26, 1914.
- Treherne, Pr. Ent. Soc. B. C., 4, 22, '14.
——— U. S. Y. B., 1908, 575.
- Argyresthia thuella**
Fletcher, Ont. Ent. Soc. R. 37, 86, 1907.
Gibson, Ont. Ent. Soc. R. 41, 14, 1911.
Young, Ont. Ent. Soc. R. 37, 16, 1907.
——— U. S. Y. B., 1908, 575.
- Argyroploce abietana**
Patch, Me. B. 162, 355, 1908.
- Arhopalus fulminans**
Felt, N. Y. St. Mus. Mem. 8, 444, 1906.
Washburn, Minn. Ent. R. 14, 58, 1912.
- Arilus cristatus**
Chittenden, U. S. C. 59, 5, 1905.
Gossard, Fla. B. 79, 303, 1905.
Symons, Md. B. 101, 198, 1905.
——— C. Gentl., 1907, 593.
- Aristotelia sp.**
Treherne, Can. Exp. Farms Ent. B. 8, 42, 1914.
- Aristotelia on strawberry**
Wilson, Oreg. Bien. Crop Pest R. f., 1911–1912, 132.
- Arizona pine beetle**, *see* **Dendroctonus arizonicus**
- Army worm**, *see* **Heliophila unipuncta**
- Arsenate of barium**
Smith, N. J. R., 1907, 476.
- Arsenate of iron**
Smith, N. J. R., 1907, 475.
Smith, N. J. R., 1910, 364.
- Arsenate of lead**
Ashby, Wis. Hort. Soc. R. f., 1909, 157.
Britton, Conn., R. 5, 260, 1906.
Britton, Conn., R. 6, 301, 1907.
Britton, Conn., Farm., Mar. 28, 1908, 1.
Brown, Wis. Farm., Apr. 5, 1906, 15.
Clinton & Britton, Conn. R. f., 1911, 356.
Dew, Ala. Hort. Soc. R. 11, 42, 1914.
Dew, J. Ec. Ent. VII, 162, 1914.
Fernald, Mass. B. 125, 63, 1908.
Garman, Ky. B. 147, 10, 1910.
Gillette, Colo. Bd. Hort. R. f., 1904, 62, 1905.
Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 11, 1907.
Haywood & McDonnell, U. S. Bu. Chem. B. 131, 1910.
Jarvis, Conn. Storrs B. 56, 225, 1909.

- Luther, Pac. Rur. Press, LXXV, 245, 1908.
- Metcalf, N. C. Dept. Agr. Sp. B. 16, '09.
- Morgan & Parman, U. S. C. 173, 1913.
- Morris & Parker, Mont. C. 36, 229, '14.
- Newell & Barber, La. Crop Pest Comm. C. 23, 1908.
- Parrott, N. Y. Fr. Grow. Assoc., '13, 47.
- Patch, Me. B. 123, 209, 1905.
- Pickett, Ill. Hort. Soc. f., 1907, 380.
- Rees, Mass. Hort. Soc. f., 1914, I, 88.
- Rogers, Pa. Dept. Agr. B. 190, 43, 1910.
- Schoene, J. Ec. Ent. VI, 157, 1913.
- Slingerland, Am. Agric. June 9, '06, 710.
- Slingerland & Crosby, N. Y. C. B. 252, 346, 1908.
- Slingerland, Herrick & Crosby, N. Y. C. B. 283, 476, 1910.
- Smith, N. J. R., 1906, 580.
- Smith, N. J. B., 213, 9, 1908.
- Smith, N. J. R., 1907, 474.
- Smith, N. J. R., 1908, 363.
- Smith, N. J. R., 1909, 360.
- Smith, Can. Hort., XXXII, 122, 1909.
- Smith, N. J. R., 1910, 362.
- Stone & Fernald, Mass. B. 123, 8, 1908.
- Street, Conn. Farm., Mar. 28, 1908, 1.
- Taft, Mich. Hort. Soc., 1908, 144, 1909.
- Thatcher, Wash. Pop. B. 51, 1913.
- Van Alstyne, Rur. N. Y., 1906, 440.
- Van Buren & Husted, N. Y. Dept. Agr. B. 24, 484, 1911.
- Warren, N. J. B. 194, 46, 1906.
- Weldon, Better Fr., Mar. 1910, 36.
- Wilken, Mich. Sp. B. 46, 410, 1908.
- Worsham, Pr. Ga. Hort. Soc., 1908, 77.
- Mich. Sp., B. 57, 521, 1912.
- Mo. Hort. Soc., 1906, 370.
- Rur. N. Y., 1905, 146.
- U. S. D. A. Ins. & Fung. No. 4, 1912.
- U. S. D. A. Ins. & Fung. No. 7, 1912.
- U. S. D. A. Ins. & Fung. No. 8, 1913.
- U. S. D. A. Ins. & Fung. Nos. 13, 20, 21, 1913.
- U. S. D. A. Ins. & Fung. No. 44, 1913.
- U. S. D. A. Ins. & Fung. No. 130, 1914.
- Arsenate of lead (Hemingway's)**
U. S. D. A. Ins. & Fung. Bd. Ins. 1, p. 15, 1914.
- Arsenate of lead, Analysis of**
Catheart, N. J. B. 214, 1908.
Catheart, N. J. B. 222, 1909.
Smith, N. J. R., 1906, 581.
Street, Conn. Ent. R. 7, 321, 1907.
Street, Conn. B. 157, 4, 1907.
Street, Conn. R. 7, 321, 1908.
Woodworth, Cal. B. 182, 177, 1906.
—— Colo. Bd. Hort. R. f., 1911, 143, 1912.
- Arsenate of lead and Bordeaux**
Rur. N. Y., 1907, 183.
- Arsenate of lead and lime-sulphur**
Bradley, Oreg. Hort. Soc., 25th Meet., 77.
- Arsenate of lead and sulphur lime, mixing**
Melander, Better Fr., Mar. 1910, 47.
- Arsenate of lead and Paris green**
Britton, Conn. R. 8, 843, 1909.
- Arsenate of lead and pyrox**
Chase, Ga. Bd. Ent. B. 32, 15, 1910.
- Arsenate of lead, Injury by**
Sibley, Ark. Hort. Soc. Sess. 28, 142, '08.
Sibley, Nat'l Fr. Grow., Apr. 1908, 2.
- Arsenate of lead, Powdered**
Hinds, J. Ec. Ent. VI, 477, 1913.
Newell & Smith, La. Crop Pest Comm. C. 33, 251, 1909.
- Arsenate of lime**
Jarvis, Conn. Storrs B. 56, 226, 1909.
Scott, Md. Hort. Soc., 1914, 101, 1915.
Smith, N. J. R., 1907, 476.
- Arsenic in insecticides**
Holland, Mass. Agr. Exp. Sta. 23rd R. 122, 1911.
- Arsenic, white**
Taft, Mich. Hort. Soc., 1908, 144, 1909.
- Arsenical dips, analysis of**
Chapin, U. S. D. A. B. 76, 1914.
- Arsenical insecticides**
Headen, Better Fr., Mar. 1910, 44.
Slingerland, Rur. N. Y., 1908, 287.
Woodworth, Pac. Rur. Press LXXX, 424, 444, 1910.
- Arsenical poisoning**
Ball, Deseret Farm, Feb. 27, 1909, 2.
Ball, Better Fr., May 1909, 21, 33.
Ball, J. Ec. Ent. II, 142, 1909.
Ball, Titus & Greaves, J. Ec. Ent. III, 187, 1910.

- Headden, Better Fr., Jan. 1909, 13.
 Headden, J. Ec. Ent. II, 239, 1909.
 Headden, J. Ec. Ent. III, 32, 1910.
 O'Gara, Better Fr., Feb. 1911, 28.
 Paddock, Better Fr., July 1909, 38.
Arsenious oxid in Paris green
 U. S. D. A. Insecticide Decision 5, 1912.
Arsenite of lime
 Caesar, Ont. Agr. Coll. B. 177, 43, 1909.
 Jordan, Stewart & Eustace, N. Y. St. B. 267, 266, 1905.
 Pickett, Ill. Hort. Soc. f., 1907, 381.
 Shutt, Can. Hort. XXXII, 139, 1909.
 Slingerland & Crosby, N. Y. C. B. 252, 347, 1908.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 476, 1910.
 Smith, N. J. B. 213, 7, 1908.
 Stone & Fernald, Mass. B. 123, 8, 1908.
 Van Alstyne, Rur. N. Y., 1906, 440.
Arsenite of soda
 Messenger, Can. Hort. XXXII, 133, '09.
 Slingerland & Crosby, N. Y. C. B. 252, 346, 1908.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 476, 1910.
 Warren, N. J. B. 194, 45, 1906.
Arsenite of zinc
 Caesar, Ent. Soc. Ont. R. 43, 111, 1913.
 Johnston, U. S. B. 109, 1912.
 Morris & Parker, Mont. C. 36, 234, '14.
 Parks, Better Fr., Aug. 1914, 26.
 Weldon, Cal. Cult. XXXIX, 174, 1912.
Arsenite of zinc, analysis
 Colo. Bd. Hort. R. f., 1911, 143, 1912.
Arthrocnodax carolina
 McGregor, J. Ec. Ent. VII, 330, 1914.
Arthrocnodax occidentalis
 Ewing, Oreg. B. 121, 58, 1914.
 Quayle, Cal. B. 234, 514, 1912.
 Quayle, J. Ec. Ent. VI, 87, 1913.
Arthrocnodax sp. on red spider
 McGregor, U. S. C. 172, 15, 1913.
Asaphes rufipes
 Herrick & Hungate, N. Y. C. B. 300, 736, 1911.
Asaphes sp.
 Britton, Conn. R. 6, 268, 1907.
 Herrick & Hungate, N. Y. C. B. 300, 736, 1911.
Ascogaster carpocapsae
 Hammar, U. S. B. 80, 110, 1910.
 Hammar, U. S. B. 115, 6, 74, 1912.
 Johnson & Hammar, U. S. B. 116, 48, 1912.
Aseum moestum
 Felt, N. Y. St. Mus. Mem. 8, 661, 1906.
Ash sawfly, see Tomostethus bardus
Ash-gray blister beetle, see Macrobasis unicolor
Ash-tree bark-beetle, see Hylesinus aculeatus
Asiatic lady-bird, see Chilocorus similis
Asopia costalis, see Hypsopygia
Asparagus beetle, see Crioceris asparagi
Asparagus insects
 Woods, N. J. Bd. Agr. R. 36, 124, 1909.
Asparagus miner, see Agromyza simplex
Asphaltum
 Morris, Cal. B. 228, 372, 1912.
Asphondylia miki
 Morrill, J. Ec. Ent. VI, 194, 1913.
 Webster, U. S. C. 147, 1, 1912.
Asphondylia opuntiae
 Hunter, Pratt & Mitchell, U. S. B. 113, 34, 1912.
Aspidimerus orbiculus
 Smith, Cal. Hort. B. III, 1, 27, 1914.
Aspidiotiphagus citrinus
 Essig, Cal. Hort. B. II, 1-2, 275, 1913.
 Isaac, Bug. vs. Bug, 19, 1906.
 Hayhurst, Ark. B. 107, 376, 1911.
 Marlatt, U. S. B. 62, 59, 1906.
 Pease, Cal. Hort. Comm. Bien. R. 1, 174, 1905.
 Quaintance, U. S. C. 124, 10, 1910.
 Quaintance & Sasscer, U. S. C. 121, 6, 1910.
 Quayle, Cal. B. 214, 465, 469, 1911.
 Quayle, Cal. B. 222, 144, 1911.
 Quayle, Cal. B. 226, 337, 1912.
 Quayle, J. Ec. Ent. IV, 511, 513, 1911.
 Taylor, Mo. Fr. Exp. Sta. B. 18, 28, '08.
Aspidiotus abietis
 Britton, Conn. R. 5, 241, 1906.
 Felt, N. Y. St. Mus. Mem. 8, 690, 1906.
Aspidiotus aesculi
 Carnes, Cal. Hort. Comm. Bien. R. 2, 204, 1907.
Aspidiotus ancylos
 Britton, Conn. B. 151, 12, 1905.
 Britton, Conn. R. 5, 241, 1906.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 105, 1913.

- Douglass, Ind. Ent. R. 4, 193, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 226, 1905.
 Forbes, Ill. B. 151, 523, 1911.
 Forbes, Ill. Ent. R. 26, 61, 1911.
 Gillette, Colo. B. 114, 13, 1906.
 Gossard, Ohio B. 233, 108, 1911.
 Houser, Ohio B. 194, 176, 1908.
 Jarvis, Ont. Ent. Soc. R. 38, 62, 1908.
 Newell, La. Crop Pest Comm. C. 4, 14, 1905.
 O'Kane, Inj. Ins. 257, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 179, 1914.
 Smith, Ga. Bd. Ent. B. 17, 70, 1905.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 18.
 Surface, Pa. D. A. Zoöl. I, 1, 15, 1911.
 Taylor, Mo. Fr. Exp. Sta. B. 18, 69, '08.
 ——— C. Gentl., 1910, 789.
- Aspidiotus articulatus**, *see* **Selenaspidium**
Aspidiotus aurantii, *see* **Chrysomphalus**
Aspidiotus camilliae
 Essig, Cal. Hort. B. II, 1-2, 126, 1913.
Aspidiotus citrinus, *see* **Chrysomphalus**
Aspidiotus comstocki
 Morrison, Ind. Ent. R. 6, 75, 1914.
Aspidiotus cyanophylli
 Britton, Conn. R. 5, 242, 1906.
 Davis, Ill. Ent. R. 27, 127, 1912.
- Aspidiotus forbesi**
 Baldwin, Ind. Ent. R. 5, 102, 1912.
 Britton, Conn. B. 151, 12, 1905.
 Britton, Conn. R. 5, 242, 1906.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 83, 1913.
 Douglass, Ind. Ent. R. 4, 201, 1912.
 Gillette, U. S. B. 52, 59, 1905.
 Gossard, Ohio B. 233, 108, 1911.
 Haseman, Mo. Hort. Soc., 1911, 262.
 Jarvis, Ont. Ent. Soc. R. 38, 59, 1908.
 Newell, La. Crop Pest Comm. C. 4, 13, 1905.
 O'Kane, Inj. Ins. 257, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 312, 1914.
 Smith, Ga. Bd. Ent. B. 17, 72, 1905.
 Smith, N. J. R., 1908, 334.
 Smith & Lewis, U. S. B. 60, 77, 1906.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 18.
 Taylor, Mo. Fr. Exp. St. B. 18, 67, 1908.
 Worsham, J. Ec. Ent. II, 206, 1909.
- Aspidiotus hederae**
 Britton, Conn. B. 151, 12, 1905.
 Britton, Conn. R. 5, 242, 1906.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 206, 1907.
 Davis, Ill. Ent. R. 27, 128, 1912.
 Douglass, Ind. Ent. R. 4, 203, 1912.
 Essig, Pom. Jr. Ent. I, 11, 1909.
 Essig, Cal. Hort. B. II, 1-2, 127, 1913.
 Fernald, Mass. Crop R. f. Oct. '07, 32.
 Fernald, Mass. Bd. Agr. R. 55, 387, '08.
 Gahan, Md. B. 119, 4, 1907.
 Lewis, Ga. Bd. Ent. B. 33, 90, 1910.
 Lewis, Ga. Hort. Soc., 1910, 90.
 Quayle, Cal. B. 214, 481, 1911.
 Quayle, U. S. D. A. B. 134, 19, 1914.
 Swenk, Nebr. Hort. Soc., 1909, 104.
- Aspidiotus howardi**
 Gillette, U. S. B. 52, 59, 1905.
 Gillette, Colo. B. 114, 6, 14, 16, 1906.
 Gillette, Colo. R. 19, 143, 1906.
 Gillette, Colo. R. Bd. Hort. f., 1909, 66.
 Gillette, Better Fr., Feb. 1910, 15, 18.
 Slingerland & Crosby, Man. Fr. Ins. 234, 1914.
 Taylor, Colo. B. 119, 8, 1906.
 Taylor, Colo. R. 19, 148, 1906.
 Taylor, Colo. B. 120, 3, 1907.
 Taylor, Colo. P. B. 30, 1907.
 Taylor, Colo. P. B. 42, 1907.
 Taylor, U. S. B. 67, 87, 1907.
 ——— U. S. Y. B., 1906, 513.
- Aspidiotus juglans-regiae**
 Caesar, Ont. Ent. Soc. R. 44, 53, 1914.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 208, 1907.
 Douglass, Ind. Ent. R. 4, 204, 1912.
 Essig, Cal. Hort. B. II, 1-2, 129, 1913.
 Forbes, Ill. B. 151, 523, 1911.
 Forbes, Ill. Ent. R. 26, 61, 1911.
 Gossard, Ohio B. 233, 108, 1911.
 Jarvis, Ont. Ent. Soc. R. 38, 61, 1908.
 Slingerland, & Crosby, Man. Fr. Ins. 360, 1914.
 Taylor, Mo. Fr. Exp. Sta. B. 18, 73, 1908.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 165.
- Aspidiotus lataniae**
 Davis, Ill. Ent. R. 27, 127, 1912.
 Gahan, Md. B. 119, 6, 1907.
- Aspidiotus obscurus**, *see* **Chrysomphalus**

Aspidiotus ostreaeformis

- Bailey, Vt. Agr. R. 5, 26, 1913.
 Brittain, Pr. Ent. Soc. B. C. 4, 16, 1914.
 Britton, Conn., B. 151, 13, 1905.
 Britton, Conn., R. 5, 242, 1906.
 Gossard, Ohio B. 233, 121, 1911.
 Jarvis, Ont. Ent. Soc. 38, 57, 1908.
 Johannsen, Me. B. 207, 432, 1912.
 Moore, Wis. B. 190, 9, 1910.
 O'Kane, Inj. Ins. 257, 1914.
 Sanders, Wis. B. 227, 17, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 260, 1914.
 Washburn, Minn. R. 12, 110, 1908.

Aspidiotus oxycoccus

- Franklin, Mass. R. 25, II, 225, 1913.

Aspidiotus perniciosus

- Adams, Ark. B. 92, 4, 1907.
 Adams, Ark. B. 102, 221, 1908.
 Alderman, Giddings & Rumsey, W. Va. C. 7, 32, 1913.
 Arbuckle, Nat'l Stockm. & Farm., May 17, 1906, 13.
 Armstrong, R. I. Bd. Agr. R. 20, 102, 1905.
 Atwood, Mo. Hort. Soc., 1907, 306.
 Atwood, N. Y. Dept. Agr. Hort. B. I, 6, 1907.
 Atwood, Pr. N. Y. Fr. Grow. Assoc., 6 Meet., 71, 1907.
 Bailey, Vt. Agr. R. 5, 25, 1913.
 Bailey, Vt. Agr. R. 6, 32, 1914.
 Baldwin, Ind. Ent. R. 5, 41, 1912.
 Baldwin, Ind. Ent. R. 6, 15, 1914.
 Ball, Deseret Farm., Dec. 14, 1907, 6.
 Ball, Utah Bd. Hort. Bien. R. f. 1905-1906, 65, 1907.
 Ball & Titus, Deseret Farm., May 6, 1911, 3.
 Barre & Conradi, S. C. B. 141, 23, 27, 41, 1909.
 Beach, Iowa B. 127, 59, 1912.
 Beattie, Can. Hort. XXX, 95, 1907.
 Becker, Pr. Ark. Hort. Soc., 1912-1913, 27.
 Bennett, Oreg. Bd. Hort. 8th Bien R. 268, 1905.
 Bentley, Tenn. B. v. XIX, 2, 13, 1906.
 Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 46.
 Bentley, Col. Rur. World, May 31, 1911, 170.
 Bentley, Tenn. Bd. Ent. B. 8, 3, 1913.
 Bentley, Tenn. Bd. Ent. R. f. 1913, 29.
 Bentley, Tenn. B. 98, 39, 1913.
 Berger, Fla. Ann. R., 1907, xxxvi.
 Bethune, Ont. Agr. Coll. R. 32, 46, 1907.
 Bethune, Ont. Agr. Coll. B. 158, 13, '07.
 Bremner, Cal. Hort. Comm. Destr. Ins. 25, 1910.
 Brittain, Can. Hort. XXXVII, 116, '14.
 Britton, Conn. B. 151, 13, 1905.
 Britton, Conn. R. 4, 221, 1905.
 Britton, Conn. Farm., Mar. 24, 1906, 1.
 Britton, Conn. R. 5, 242, 1906.
 Britton, Conn. R. 6, 279, 1907.
 Britton, N. Y. Fr. Grow. Assoc., 1907, 151.
 Britton, Conn. R. 7, 270, 1908.
 Britton, Conn. B. 165, 1909.
 Britton, Conn. Farm., Apr. 10, 1909, 1.
 Britton, Conn. R. 8, 796, 1909.
 Britton, Conn. Farm., May 14, 1910, 6.
 Britton, Rur. N. Y., 1911, 193.
 Britton, Vt. Hort. Soc. R. 8, 12, 1911.
 Britton, Conn., R. 13, 254, 1914.
 Britton & Walden, Conn. R. 5, 196, '06.
 Britton & Walden, Conn. R. 7, 282, '08.
 Brooks & Rumsey, W. Va. Sp. B. 3, 137, 1905.
 Brown, Farm Guide, Apr. 8, 1911, 6.
 Brues, Wis. R. 22, 324, 1905.
 Bryant, Farm & Ranch, Mar. 28, 1908, 13.
 Buckley, Me. Dept. Agr. B., vol. X, 3, 4, 1911.
 Burgess, Ohio Nurs. Orch. Insp. R. 4, 8, 1906.
 Burgess, Ohio Nurs. Orch. Insp. B. 8, 5, 1907.
 Burgess, Ohio Nurs. Orch. Insp. B. 9, 5, 1907.
 Burgess, U. S. B. 60, 72, 1906.
 Butz, Nat'l Stockm. & Farm., Mar. 23, 1905, 13.
 Caesar, Ont. Agr. Coll. B. 177, 48, 1909.
 Caesar, Ont. Ent. Soc. R. 40, 18, 1910.
 Caesar, Ont. Ent. Soc. R. 41, 23, 1911.
 Caesar, Ont. Agr. Coll. B. 198, 18, 1912.
 Caesar, Ont. Ent. Soc. R. 42, 28, 1912.
 Caesar, Ont. Ent. Soc. R. 43, 78, 1913.
 Caesar, Ont. Agr. Coll. B. 219, 2, 1914.
 Caesar, Ont. Ent. Soc. R. 44, 49, 1914.
 Carmody, Farm. Guide, Jan. 24, 1914, 4.

Aspidiotus perniciosus (*Cont'd*)

- Carnes, Cal. Hort. Comm. Bien. R. 2, 209, 1907.
- Chandler, Mo. Hort. Soc., 1909, 354.
- Chandler, Mo. B. 102, 249, 1912.
- Chase, Ga. Bd. Ent. B. 38, 21, 1913.
- Clarke, Ala. Poly. C. 1, 3, 1906.
- Clarke, Ala. Poly. B. 139, 16, 1907.
- Clinton & Britton, Conn. R. f. 1909, 1910, 610, 1911.
- Close & Ballard, Md. B. 159, 189, 1911.
- Cockerell, Kans. Farm., June 14, 1906, 611.
- Conradi, U. S. B. 52, 66, 1905.
- Conradi, S. C. B. 134, 1908.
- Conradi, Tex. Stockm. Farm., June 10, 1908, 6.
- Conradi & Thomas, S. C. B. 143, 12, '09.
- Cooley, Mont. Bd. Hort. f. 1909-1910, 40.
- Cordley, Better Fr., Dec. 1906, 3.
- Cordley, Oreg. Bd. Hort. 9th Bien. R., 81 (1905-1906), 1906.
- Cordley, Oreg. B. 88, 3, 1906.
- Cordley, Better Fr., Mar. 1910, 40.
- Cordley, Better Fr., Aug. 1912, 10.
- Cotton, Ohio Nurs. Orch. Insp. B. 7, 33, 1906.
- Craig, Va. Crop Pest Comm. C. 2, n. s., 4, 1906.
- Dean, Am. Agric. Dec. 24, 1910, 636.
- Dean, Kans. Hort. Soc., 1912, 81.
- Dean, Kans. Hort. Soc., 1913, 181.
- Dean & Peairs, Kans. Agr. Educ. VI, 2, 12, 1913.
- DeGraff, Mich. Hort. Soc. 1911, 89, '12.
- Doten, Nev. B. 63, 31, 1907.
- Doten, Nev. B. 72, 33, 1909.
- Doten, Nev. B. 73½, 41, 1910.
- Douglass, Ind. Bd. Agr. R. 56, 579, '07.
- Douglass, Ind. Ent. R. 1, 17, 1908.
- Douglass, Ind. Ent. R. 2, 103, 1910.
- Douglass, Ind. Ent. R. 3, 101, 1910.
- Douglass, Ind. Ent. R. 4, 204, 1912.
- Douglass, Better Fr., Jan. 1913, 13.
- Dunn, R. I. Bd. Agr. R. 24, 19, 1909.
- Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 112, 1905.
- Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 224, 1907.
- Emory, Am. Agric. Jan. 27, 1906, 95.
- Essig, J. Ec. Ent. VI, 270, 1913.
- Essig, Cal. Hort. B. II, 1-2, 129, 1913.
- Evans, Ohio Nurs. Orch. Insp. R. 6, 5, 1908.
- Evans, Mo. Fr. Exp. Sta. Bien. R. f. 1909-1910, 8.
- Farnsworth, Mich. Hort. Soc., 1907, 95, 1908.
- Faurot, Mo. Fr. Exp. Sta. B. 23, 28, '12.
- Faurot, Mo. Bd. Agr. R. 45, 574, 1913.
- Felt, N. Y. R. 20, 386, 1905.
- Felt, N. Y. Fr. Grow. Assoc., 1905, 27.
- Felt, Gard. Mag., Feb. 1905, 22.
- Felt, Gard. Mag., Mar. 1905, 76.
- Felt, Gard. Mag., July 1905, 284.
- Felt, N. Y. R. 21, 78, 1906.
- Felt, N. Y. Fr. Grow. Assoc., 1906, 123.
- Felt, N. Y. R. 22, 49, 1907.
- Felt, N. Y. Fr. Grow. Assoc., 1907, 27.
- Felt, C. Gentl., 1908, 107, 306.
- Felt, N. Y. St. Mus. Mem. 8, 216, 1905.
- Felt, U. S. B. 52, 51, 1905.
- Felt, U. S. B. 60, 137, 1906.
- Felt, U. S. B. 67, 39, 1907.
- Felt, J. Ec. Ent. I, 149, 1908.
- Felt, N. Y. R. 23, 34, 1908.
- Felt, C. Gentl., 1910, 107.
- Felt, N. Y. R. 25, 90, 1910.
- Felt, Mass. Fr. Grow. Assoc., R. 12-16, 11, 37, 141, 1910.
- Felt, N. Y. R. 26, 46, 1911.
- Felt, Nur. N. Y., 1910, 256.
- Felt, N. Y. Farm., July 18, 1912, 8.
- Felt, N. Y. R. 27, 102, 1912.
- Felt, Amer. Cult., Apr. 4, 1914, 3.
- Felt, N. Y. Fr. Grow. Assoc., 1914, 22, 163.
- Fernald, Mass. R. 17, 113, 1905.
- Fernald, Mass. R. 18, 151, 1906.
- Fernald, Mass. Bd. Agr. R. 54, 208, '07.
- Fernald, Mass. B. 116, 3, 1907.
- Fernald, Conn. Farm., Mar. 21, 1908, 6.
- Fernald, Mass. B. 125, 58, 1908.
- Fernald, Mass. Bd. Agr. R. 55, 189, '08.
- Fernald, Mass. R. 22, II, 72, 1910.
- Fernald, Mass. Bd. Agr. C. 6, 3, 1913.
- Fernald, Mass. R. 25, II, 85, 1913.
- Fernald & Fernald, Mass. R. 17, 113, '05.
- Fernald & Fernald, Mass. R. 18, 151, '06.
- Fernald & Fernald, Mass. R. 19, 200, 1907.
- Fernald, Fernald & Summers, Mass. R. 20, 155, 1908.

Aspidiotus perniciosus (*Cont'd*)

- Fish, Farm & Ranch, June 29, 1912, 12.
 Fisher, Ont. Ent. Soc. R. 35, 8, 1905.
 Fletcher, Ont. Ent. Soc. R. 35, 53, 1905.
 Fletcher, Ont. Ent. Soc. R. 36, 87, 1906.
 Fletcher, Ont. Ent. Soc. R. 37, 84, 1907.
 Forbes, Ill. B. 107, 244, 1906.
 Forbes, Ill. Ent. R. 24, 59, 1908.
 Forbes, Col. Rur. World, Sept. 7, 1910, 282.
 Forbes, Ill. B. 151, 520, 1911.
 Forbes, Ill. Ent. R. 26, 58, 1911.
 Forbes, Kans. Hort. Soc., 1911, 310.
 Fox, Pa. Hort. Assoc., Pr. 50th Meet., 1909, 15.
 French, Ill. Hort. Soc. f., 1906, 429.
 French, Prai. Farm., LXXIX, 412, '07.
 Fulton, Wright & Gregg, Pa. B. 110, 16, 1911.
 Funk, Pa. Dept. Agr. B. 144, 39, 1906.
 Funk, Pa. Dept. Agr. B. 152, 213, 1907.
 Garcia, Kans. Farm., Mar. 7, 1907, 316.
 Garcia, N. Mex. B. 68, 44, 1908.
 Garcia, N. Mex. B. 75, 37, 1910.
 Gardner, Maine Comm. Agr. R., 1911, 50, 1912.
 Gardner, Maine Comm. Agr. R., 1913, 54, 1914.
 Garman, Ky. Hort. Soc., 1911, 28.
 Garman, J. Ec. Ent. V, 466, 1912.
 Garman, Ky. B. 133, 52, 1908.
 Garman, Ky. Bur. Agr. Bien. R. 19, 432, 1912.
 Gee, Prog. Farm., 1912, 304.
 Gillette, U. S. B. 52, 59, 1905.
 Gillette, Colo. B. 114, 13, 1906.
 Gillette, Colo. Fr. Grow., Oct. 1909, 6.
 Gillette, Colo. P. B. 48, 1909.
 Gillette, Colo. R. 22, 29, 1909.
 Gillette, Colo. R. Bd. Hort. f. 1909, 66.
 Gillette, Better Fr., Feb. 1910, 18.
 Goss, Or. Judd. Farm., Nov. 3, 1906, 445.
 Gossard, Ohio B. 164, 13, 1905.
 Gossard, Ohio C. 60, 1906.
 Gossard, J. Ec. Ent. I, 184, 1908.
 Gossard, Ohio B. 198, 39, 1908.
 Gossard, O. Farm., Sept. 17, 1910, 236.
 Gossard, Ohio B. 233, 108, 1911.
 Gossard, O. Farm., Apr. 12, 1913, 531.
 Gossard, Ohio Hort. Soc., 1914, 103.
 Green, Nat'l Fr. Grow., Mar. 1906, 5.
 Green, Ind. Bd. Agr. R. 55, 546, 1907.
 Hale, Conn. Farm., Dec. 1, 1906, 11.
 Harcourt, Can. Hort., 1905, XXVIII, 13.
 Haseman, Mo. Hort. Soc., 1911, 224.
 Haseman, Mo. B. 98, 61, 1912.
 Hayden, Prog. Farm., Nov. 28, 1914, 1213.
 Hayhurst, Ark. B. 107, 369, 1911.
 Headlee, Kans. Hort. Soc., 1908, 51.
 Headlee, N. J. Hort. Soc., 1913, 49.
 Headlee, Kans. Hort. Soc., 1909, 151.
 Headlee, Kans. Hort. Soc., 1911, 160.
 Headlee, N. J. Bd. Agr. R. 41, 235, '14.
 Heaton, Rur. N. Y., 1908, 567.
 Hedrick, Mass. Bd. Agr. C. 14, 6, 1914.
 Herrick, Miss. B. 90, 4, 1905.
 Herrick & Harned, J. Ec. Ent. II, 295, 1909.
 Hewitt, Ark. B. 114, 509, 1913.
 Hewitt & Hayhurst, Ark. B. 109, 433, 1911.
 Hickenlooper, Deseret Farm., Mar. 16, 1907, 6.
 Hickenlooper, Utah Bd. Hort. Bien. R. f., 1905-1906, 90, 1907.
 Hinds, Ala. Hort. Soc. R. 5, 88, 1908.
 Hinds, Ala. Poly. B. 144, 3, 1909.
 Hinds, Ala. Poly. R. 21, 26, 1909.
 Hinds, Prog. Farm., Feb. 19, 1910, 167.
 Hinds, Prog. Farm., Feb. 26, 1910, 191.
 Hinds, Ala. Hort. Soc. R. 8, 80, 1911.
 Hinds, Pr. Ala. Hort. Soc. 9, 123, 1911.
 Hitchings, Me. Comm. Agr. R., 1906, 201, 1907.
 Hitchings, Me. Ent. R. 2, 31, 1907.
 Hitchings, Me. Ent. R. 3, 97, 1908.
 Hitchings, Me. Comm. Agr. R., 1910, 48, 1911.
 Hitchings, Me. Ent. R. 6, 6, 1911.
 Hodgkiss & Sirrine, N. Y. St. B. 273, 475, 1905.
 Hopkins, Rur. N. Y., 1907, 149.
 Hopkins, Or. Judd. Farm., Feb. 29, 1908, 261.
 Houghton, Del. B. 74, 1906.
 Houghton, Del. R. 16-17-18, 79, 1907.
 Houser, Ohio B. 194, 175, 1908.
 Houser, Ohio C. 143, 50, 1914.
 Howard, U. S. R. Ent., 1906, 16.
 Howard, U. S. R. Ent., 1907, 23.
 Howard, U. S. R. Ent., 1908, 20.

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- Hunter, Kans. Hort. Soc., 1910, 50.
 Hunter, Kans. Hort. Soc. 1913, 179.
 Hurst, Better Fr., Sept., 1908, 35.
 Isaac, Cal. Cult., XXVI, 366, 1906.
 Jarvis, Can. Ent., 1906, 292.
 Jarvis, Conn. Storrs, B. 49, 5, 1907.
 Jarvis, Ont. Ent. Soc. R. 37, 114, 1907.
 Jarvis, Ont. Ent. Soc. R. 38, 52, 1908.
 Jarvis, Conn. Storrs, B. 56, 241, 1909.
 Jarvis, Conn. Storrs, B. 66, 253, 1911.
 Johannsen, Me. B. 177, 28, 1910.
 Johannsen, Me. B. 207, 434, 1912.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 330.
 Johannsen & Patch, Me. B. 195, 237, 1911.
 Johnson, Col. Rur. World, Mar. 21, 1906, 91.
 Johnson, Or. Judd. Farm., Nov. 24, 1906, 541.
 Johnson, Colo. Fr. Grow., Feb. '08, 7.
 Jordan, N. Y. St. B. 274, 515, 1905.
 Jordan, N. Y. St. B. 284, 343, 1906.
 Karutz, Pr. N. Y. Fr. Grow. Assoc., 6 Meet., 67, 1907.
 Kinney, Col. Rur. World, Dec. 18, 1907, 403.
 Kirby, N. J. Bd. Agr. R. 35, 287, 1908.
 Lamson, Conn. Storrs B. 71, 62, 1912.
 Lee, Pa. Hort. Assoc. R. f. 1906, 53.
 Lochhead, Ont. Agr. Coll. B. 144, 30, 1905.
 Lochhead, Ent. Soc. Ont. R. 35, 33, '05.
 Lochhead, Ont. Ent. Soc. R. 36, 27, 134, 1906.
 Lochhead, Syn. Ec. Ent. 42, 1914.
 MacLellan, R. I. Bd. Agr. R. 20, 114, 1905.
 Mackintosh, Ala. Hort. Soc. R. 3, 16, 1906.
 Marlatt, U. S. B. 62, 7, 1906.
 Marlatt, U. S. C. 42, 4th Ed., 1906.
 Marlatt, U. S. C. 42, 5th Ed., 1909.
 Matheson, J. Ec. Ent. VII, 141, 1914.
 McCue, Nat'l Fr. Grow., Mar. 1905, 30.
 McPherson, Northw. Hort., Jan., '06, 6.
 Menges, Pa. R. 16, 480, 1910.
 Merrill, N. Mex. R. 25, 82, 1914.
 Miller, Pa. Hort. Assoc. R. f., 1906, 44.
 Moore, Wis. R. 24, 369, 1907.
 Moore, Wis. B. 190, 7, 1910.
 Morgan, Tenn. Bd. Ent. R. f. 1910, 36.
 Morrell, Pr. N. Y. Fr. Grow. Assoc., 6 Meet., 63, 1907.
 Morrill, S. W. Stockm., Dec. 5, 1913, 11.
 Morrill, Ariz. Comm. Agr. & Hort. R. 6, 16, 1914.
 Munson, Me. Dept. Agr. Quart. B., vol. IV, 1, 14, 1905.
 Murtfeldt, Col. Rur. World, Nov. 3, 1909, 347.
 Neilson, Can. Hort. 1913, XXXVI, 250.
 Newell, La. Crop Pest Comm. C. 4, 3, 1905.
 Newell, La. Hort. Soc., 1906, 65.
 Newell, Pr. La. Hort. Soc., 1906, 65.
 Newell, Tex. P. B., 1910.
 Newell, Tex. Stockm. Farm., Nov. 9, 1910, 2.
 Newell & Rosenfeld, La. Crop Pest Comm. C., 12, 4, 1907.
 Newell & Rosenfeld, J. Ec. Ent. I, 153, 1908.
 Newell & Smith, U. S. B. 52, 69, 1905.
 Nicholson, Okla. B. 79, 67, 1908.
 Niven, Prog. Farm., Nov. 26, 1910, 931.
 Niven, S. C. C. 21, 8, 1913.
 Norton, Col. Rur. World, July 25, 1906, 235.
 O'Kane, C. Gentl., Aug. 16, 1913, 1198.
 O'Kane, Inj. Ins. 254, 1914.
 Orr, Farm & Ranch, Apr. 28, 1906, 11.
 Outten, Am. Agric., Feb. 17, 1910, 268.
 Parrott, Amer. Cult., May 6, 1905, 9.
 Parrott, Pr. N. Y. Fr. Grow. Assoc., 4th East Meet., 129, 1906.
 Parrott, Pr. N. Y. Fr. Grow. Assoc., 6 Meet. 80, 1907.
 Parrott, Rur. N. Y., 1907, 818.
 Parrott, N. Y. St. C. 9, 1908.
 Parrott, Pr. N. Y. Fr. Grow. Assoc., 6th East Meet., 146, 1908.
 Parrott, Pr. N. Y. Fr. Grow. Assoc., 7 Meet., 21, 1908.
 Parrott, N. Y. Dept. Agr. B. 37, 1409, 1912.
 Parrott, N. Y. Dept. Agr. B. 50, 1735.
 Parrott, Pr. N. Y. Fr. Grow. Assoc., 11 Meet., 46, 1912.
 Parrott, Hodgkiss & Schoene, N. Y. St. B. 296, 1908.
 Parrott, Hodgkiss & Sirrine, N. Y. St. B. 281, 263, 1907.

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- Parrott & Schoene, N. Y. St. B. 330, 453, 1910.
- Parry, Utah, Bd. Hort. Bien. R. f., 1903-1904, 38, 1905.
- Peairs, Kans. Farm., Dec. 17, 1910, 4.
- Peairs, Kans. Hort. Soc., 1911, 306.
- Pease, Cal. Cult., XXX, 571, 1908.
- Phillips, South. Plant., Mar. 1905, 224.
- Phillips, South. Plant., Nov. 1905, 879.
- Phillips, Va. Hort. Soc. 9th R. 207, 105.
- Phillips, South. Plant., Nov. 1906, 875.
- Phillips, Va. B. 179, 78, 1908.
- Phillips, South. Plant., Mar. 1909, 233.
- Plank, Rur. N. Y., 1912, 1176.
- Platt, Conn. Farm., Jan. 7, 1905, 12.
- Popenoe, Kans. B. 136, 199, 1906.
- Popenoe, Kans. Farm., May 3, 1906, 493.
- Popenoe, Kans. P. B. 150, 1906.
- Popenoe, Kans. Hort. Soc., 906, 67.
- Popenoe, Kans. Farm., Apr. 4, 1907, 447.
- Powell, C. Gentl., 1907, 860, 1075.
- Pratt, Mass. Bd. Agr. R. 183, 1908.
- Price, Va. C. 7, 21, 1909.
- Quaintance, U. S. Y. B., 1906, 429.
- Quaintance, Mich. Hort. Soc., 1905-1906, 55, 1907.
- Quaintance, U. S. Y. B., 1905, 335.
- Quaintance, Better Fr. June, 1909, 16.
- Quaintance, U. S. B. 84, 7, 1909.
- Quaintance, U. S. C. 124, 1, 1910.
- Quaintance & Scott, U. S. F. B. 492, 22, 1912.
- Quayle, J. Ec. Ent. IV, 510, 1911.
- Reed, Farm. Guide, Jan. 27, 1912, 17.
- Rhodes, South. Cult., Jan. 15, 1906, 26.
- Richardson, Rur. N. Y., 1905, 198, 630.
- Ronian, N. Eng. Farm., Jan. 14, '05, 8.
- Rosenfeld, La. Hort. Soc., 1907, 27.
- Rosenfeld, La. Hort. Soc., 1908, 97.
- Rumsey, W. Va. R. f., 1904-1905, 11.
- Rumsey, W. Va. Hort. Soc. 14th R. 28, 1907.
- Rumsey, W. Va. Crop Pest Comm. B. 3, 3, 1914.
- Rumsey & Brooks, W. Va. R. f. 1905-1906, 13.
- Rumsey & Brooks, W. Va. B. 107, 349, 1906.
- Rumsey & Brooks, W. Va. R. f. 1907-1908, 22.
- Rumsey & Brooks, W. Va. B. 116, 241, 1908.
- Russell, Wis. B. 240, 44, 1914.
- Sanborn, Am. Agric., Dec. 24, 1910, 636.
- Sanborn, C. Gentl., 1910, 1079.
- Sanborn, Can. Hort., 1911, XXXIV, 20.
- Sanborn, Okla. P. B. 179, 1911.
- Sanborn, Okla. R. 21, 27, 1912.
- Sanders, Wis. B. 227, 14, 1912.
- Sanders, Ent. Soc. Ont. R. 43, 61, 1913.
- Sanders, Wis. B. 228, 79, 1913.
- Sanderson, N. H. Hort. Soc., 1907, 69.
- Sanderson, N. H. C. 5, 1908.
- Sanderson, Ins. Pests, 538, 1912.
- Schock, Nat'l Fr. Grow., Dec. 1906, 17.
- Scott, Va. St. Hort. Soc. 17th R., 92, '13.
- Scott, Va. Agr. R. f., 1913, 116, 1913.
- Severin, J. Ec. Ent. III, 101, 1913.
- Shaw, Ohio Bd. Agr. R. 63, 1908, 693.
- Shaw, Ohio Nurs. Orch. Insp. R. 7, 15, 1909.
- Shaw, Ohio Hort. Soc., 1911, 23.
- Sherman, Prog. Farm., Feb. 14, 1905, 2.
- Sherman, Prog. Farm., Aug. 1, 1905, 4.
- Sherman, Ont. Ent. Soc. R. 36, 22, 1906.
- Sherman, N. C. Crop Pest 11, 1907.
- Sherman, N. C. Dept. Agr. B. v. 28, No. 5, 5, 1907.
- Sherman, N. C. Dept. Agr. B. v. 28, No. 6, 3, 1907.
- Sherman, N. C. Dept. Agr. B. June, 1909, 17.
- Sherman, N. C. Ent. C. 26, 1909.
- Sherman, N. C. Dept. Agr. B. v. 33, No. 6, 5, 1912.
- Sherman, Prog. Farm., Dec. 20, 1913, 1333.
- Slingerland, Rur. N. Y., 1906, 17.
- Slingerland, Green's Fr. Grow., Apr. 1907, 1.
- Slingerland, Rur. N. Y., 1907, 123.
- Slingerland, N. Y. Fr. Grow. Assoc., 1908, 19.
- Slingerland, et al, Rur. N. Y., 1908, 125.
- Slingerland & Crosby, N. Y. C. B. 252, 339, 1908.
- Slingerland & Crosby, Man. Fr. Ins. 162, 1914.
- Slingerland, Herrick & Crosby, N. Y. C. B. 283, 468, 1910.
- Smith, N. J. Ent. C. 24.

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- Smith, Can. Hort. XXVIII, 293, 377, 1905.
- Smith, Conn. Farm., June 10, 1905, 2.
- Smith, Ga. Bd. Ent. B. 17, 60, 1905.
- Smith, Ga. Hort. Soc., 1905, 28.
- Smith, N. J. B. 181, 22, 1905.
- Smith, N. J. B. 186, 3-14, 1905.
- Smith, N. J. R., 1905, 529.
- Smith, N. J. R., 1906, 517, 573.
- Smith, Ga. Bd. Ent. B. 20, 164, 1906.
- Smith, Ga. Bd. Ent. B. 21, 203, 1906.
- Smith, Ga. Ent. R. f. 1906, 6.
- Smith, Ont. Ent. Soc. R. 37, 25, 1907.
- Smith, W. Va. Hort. Soc. 13th R. 66, '06.
- Smith, Pr. Ga. Hort. Soc., 1907, 149.
- Smith, U. S. B. 67, 103, 1907.
- Smith, N. J. B. 213, 41, 1908.
- Smith, Ill. Hort. Soc. f. 1909, 472.
- Smith, N. J. R., 1909, 392.
- Smith, Prog. Farm., Feb. 25, 1909, 2.
- Smith, Rur. N. Y., 1909, 823.
- Smith, N. C. B. 206, 58, 84, 1910.
- Smith, N. J. Bd. Agr. R. 37, 189, 1910.
- Smith, N. J. R., 1910, 306.
- Smith, N. J. B. 235, 19 & 28, 1911.
- Smith, N. J. R., 1911, 425.
- Smith, & Lewis U. S. B. 60, 77, 1906.
- Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 18.
- Stanton, Or. Judd Farm., Apr. 4, 1908, 446.
- Stedman, Mo. Hort. Soc., 1906, 230.
- Stene, Joint B. R. I. Bd. Agr. & Agr. Coll., 1908.
- Stene, R. I. Bd. Agr. R. f. 1909, 59.
- Stene, R. I. Bd. Agr. R. 21, 40, 1906.
- Stene, R. I. Nurs. Insp. 24, 1906.
- Stene, Joint B. R. I. Bd. Agr. & Agr. Coll. 20, 1908.
- Stene, R. I. Bd. Agr. R. 25, 59, 146, '10.
- Stene, Comm. Suppr. G. & B-T Moths R. f., 1911, 38.
- Stewart, Rur. N. Y., 1910, 944.
- Stone, Green's Fr. Grow., Feb. 1906, 22.
- Street, South. Plant., Nov. 1909, 1036.
- Stringfellow, Farm & Ranch, July 28, 1906, 10.
- Stuart, Vt. Hort. Soc. R. 4, 75, 1907.
- Stuart, Vt. R. 19, 295, 1907.
- Stuart, Vt. Hort. Soc. R. 5, 102, 1908.
- Stuart, Vt. Hort. Soc. R. 6, 98, 1909.
- Stuckey, South. Cult., Feb. 1, 1910, 30.
- Stuckey, South. Cult., Feb. 1, 1913, 42.
- Stuckey, Prog. Farm., Jan. 24, '14, 116.
- Summers, J. Ec. Ent. II, 127, 1909.
- Summers, Iowa, Hort. Soc. f. 1912, 179, 1913.
- Surface, Pa. D. A. Zoöl. B. II, 9, 295, 1905.
- Surface, Pa. D. A. Zoöl. B. II, 10-11, 342, 1905.
- Surface, Pa. D. A. Zoöl. B. III, 2, 49, '05.
- Surface, Pa. D. A. Zoöl. III, 7, 196, '05.
- Surface, Pa. Dept. Agr. R. 11, 570, '05.
- Surface, Pa. D. A. Zoöl. III, 10, 304, '06.
- Surface, Pa. D. A. Zoöl. III, 11, 335, '06.
- Surface, Pa. D. A. Zoöl. B. III, 12, 377, 381, 1906.
- Surface, Pa. D. A. Zoöl. IV, 7, 246, '06.
- Surface, Pa. D. A. Zoöl. IV, 8, 275, '06.
- Surface, Pa. Dept. Agr. R. 12, 545, '06.
- Surface, Pa. Hort. Assoc. R. f. '06, 40.
- Surface, Pa. Dept. Agr. R. 13, 302, '07.
- Surface, Pa. D. A. Zoöl. B. IV, 10, 357, 365, 1907.
- Surface, Pa. D. A. Zoöl. IV, 11, 399, '07.
- Surface, Pa. D. A. Zoöl. IV, 12, 418, '07.
- Surface, Pa. D. A. Zoöl. V, 6, 171, 1907.
- Surface, Pa. D. A. Zoöl. B. V, 7, 220, '07.
- Surface, Pa. Hort. Assoc. R. f. '07, 70.
- Surface, Pa. D. A. Zoöl. V, 9, 270, 287, 1908.
- Surface, Pa. D. A. Zoöl. VI, 7, 239, '08.
- Surface, Pa. D. A. Zoöl. VI, 10, 345, '09.
- Surface, Pa. D. A. Zoöl. B. VI, 11, 368, 1909.
- Surface, Pa. D. A. Zoöl. VII, 2, 58, '09.
- Surface, Pa. D. A. Zoöl. VII, 6, 179, '09.
- Surface, Pa. Dept. Agr. R. 16, 115, '10.
- Surface, Pa. D. A. Zoöl. B. I, 1, 15, 65, 1911.
- Surface, Pa. D. A. Zoöl. II, 1, 11, 1911.
- Surface, Pa. D. A. Zoöl. B. III, 1, 12, 30, 1913.
- Surface, Pa. R. 19, 92, 1914.
- Symonds, Colo. Fr. Grow., May '08, 6.
- Symons, Md. B. 101, 132, 146, 1905.
- Symons, Md. Hort. Soc., '05, 61, '05.
- Symons, U. S. B. 60, 82, 1906.
- Symons, Md. Hort. Soc., '06, 145, '07.
- Symons, Md. Hort. Soc., '07, 138, '08.
- Symons, Md. B. 131, 129, 1908.
- Symons, Md. Hort. Soc., '09, 159, '10.

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- Symons, Md. Hort. Soc., '10, 103, '11.
 Symons & Cory, Md. B. 175, 171, 1913.
 Symons, Cory & Babcock, Md. B. 161, 221, 1911.
 Symons & Gahan, Md. Hort. Soc., 1904, 34, 1905.
 Symons & Gahan, Md. B. 112, 71, 1906.
 Taft, Mich. Bd. Agr. R. 44, 234, 1905.
 Taft, Nat'l Fr. Grow., Oct. 1905, 6.
 Taft, Mich. Farm., Dec. 9, 1905, 490.
 Taft, Mich. Bd. Agr. R. 45, 106, 1906.
 Taft, Mich. Bd. Agr. R. 46, 87, 1907.
 Taft, Mich. Farm., Mar. 2, 1907, v. 51, p. 236.
 Taft, Wis. Hort. Soc. R. f. 1908, 92.
 Taft, Prai. Farm., Feb. 1, 1911, 12.
 Taft, Mich. R. 42, 131, 1913.
 Taft, Mich. R. 53, 154, 1914.
 Taft & Farrand, Mich. Sp. B. 35, 316, 1906.
 Taylor, Mo. Fr. Exp. Sta. B. 18, 8, '08.
 Taylor, Mo. Fr. Exp. Sta. Bien. R., 1907-1908, 10.
 Taylor, Mo. Fr. Exp. Sta. C. 3, 1908.
 Taylor, Mo. Hort. Soc., 1908, 70.
 Taylor, Colo. Fr. Grow., Nov. 1909, 1.
 Taylor, Green's Fr. Grow., Dec., '09, 1.
 Thompson, Can. Hort. XXVIII, 95, '05.
 Titus, Deseret Farm., Mar. 14, '08, 14.
 Treherne, Ont. Ent. Soc. R. 42, 20, '12.
 Troop, Ind. Bd. Agr. R. 54, 485, 1905.
 Troop, Ind. B. 102, 249, 1905.
 Troop, Ind. Hort. Soc. f. '04, 93, '05.
 Troop, Nat'l Fr. Grow., July, '05, 7.
 Troop, Ind. Hort. Soc. f. '05, 90, '06.
 Troop, Ind. Hort. Soc. f. '06, 116, '07.
 Troop, Ind. Bd. Agr. R. 55, 473, 1907.
 Troop & Woodbury, Ind. B. 118, 397, 411, 1907.
 Troop & Woodbury, Colo. Fr. Grow., Apr. 8, 1911.
 Van Buren, Rur. N. Y., 1905, 165.
 Van Buren, Rur. N. Y., '07, 554, 909.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 477, 1911.
 Verhalen, Farm & Ranch, Jan. 10, '14, 12.
 Volck, Pac. Rur. Press, LXXIX, 144, '10.
 Volck, Kans. Hort. Soc., 1909, 311.
 Volck, Cal. Fr. Grow., Jan. 8, 1910, 4.
 Walden, Conn. R. 10, 691, 1911.
 Washburn, Minn. Ent. R. 13, 67, 1910.
 Washburn, Minn. R. 15, 31, 1914.
 Waugh, Mass., Crop R. f. June, '07, 35.
 Weed, Oreg. Bd. Hort. 8th Bien. R. 275, 1905.
 Weiss, N. J. R., 1912, 431.
 Weiss & Patterson, N. J. C. 15, 20, '12.
 Welden, J. Ec. Ent. I, 146, 1908.
 Welden, Colo. R. 22, 35, 1909.
 Wheeler, Mass. Bd. Agr. R. 60, 107, '13.
 White, Mich. Farm. Nov. 2, 1912, v. 139, p. 397.
 Whiteside, Mont. Bd. Hort. f. 1905-1906, 31, 1907.
 Wilken, Mich. Farm., Mar. 1, 1913, 257.
 Williams & Price, Ala. Poly. B. 156, 125, 606, 1911.
 Wilson, Ill. Hort. Soc. f. 1907, 568.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 112.
 Woodbury, Farm. Guide, Oct. 6, '06, 1.
 Woodbury, Ind. Farm., Oct. 6, '06, 3.
 Woodbury, Prai. Farm. LXXVIII, 617, 1906.
 Woodbury, Farm. Guide, Feb. 23, '07, 1.
 Woodbury, Ind. Hort. Soc. f. 1906, 156, 1907.
 Woodbury, Ind. B. 138, 75, 1910.
 Woodward, Nat'l Stockm. & Farm., Mar. 10, 1910, 10.
 Worsham, Ga. Bd. Ent. B. 27, 71, 1908.
 Worsham, Ga. Bd. Ent. B. 30, 105, '09.
 Worsham, Ga. Hort. Soc., 1909, 105.
 Worsham, J. Ec. Ent. II, 206, 1909.
 Worsham, Ga. Bd. Ent. B. 33, 121, '10.
 Worsham & Chase, Ga. Bd. Ent. B. 31, 5, 1910.
 ——— Amer. Cult., Dec. 15, 1906, 11.
 ——— Better Fr., Nov. 1907, 14.
 ——— Can. Hort. XXX, 123, 1907.
 ——— Can. Hort. XXXI, 3, 1908.
 ——— Can. Hort. XXXV, 264, 1912.
 ——— C. Gentl., 1906, 162, 921, 1211.
 ——— C. Gentl., 1906, 947.
 ——— C. Gentl., 1908, 628, 647, 889.
 ——— C. Gentl., 1909, 859.
 ——— Kans. Farm., Dec. 18, 1909, 3.
 ——— Mont. Bd. Hort. f. 1903-1904, 101, 1905.
 ——— Mont. Bd. Hort. f. 1907-1908, 27, 1909.
 ——— N. Eng. Farm., July 8, 1905, 6.
 ——— N. Eng. Farm., Aug. 25, '06, p. 3.

Aspidiotus perniciosus (Cont'd)

- N. Eng. Farm., Dec. 29, 1906, p. 8.
- N. Eng. Farm., Mar. 27, 1909, 9.
- Ont. Agr. Coll. B. 157, 1, 1907.
- Pa. Hort. Assoc. R. f. 1905, 25.
- Rur. N. Y., 1906, 58, 181.
- Rur. N. Y., 1907, 41, 12, 538, 650, 699, 700, 886.
- Rur. N. Y., 1908, 632.
- Rur. N. Y., 1910, 73, 625.
- Rur. N. Y., 1913, 870.
- U. S. Y. B., 1905, 633.
- U. S. Y. B., 1906, 513.
- U. S. Y. B., 1908, 576.
- Va. Agr. R. f. 1904, 112, 1905.
- Aspidiotus perniciosus and Osage orange hedge**
Symons & Peairs, Md. B. 140, 87, 1909.
Wells, Mich. Farm., Nov. 10, 1912, 442.
- Aspidiotus perniciosus, disease of, see Sphaerostilbe**
- Aspidiotus perniciosus, Kerosene for**
Hubbell, Nat'l Fr. Grow., Oct. '07, 10.
Hubbell, Nat'l Fr. Grow., Feb. '08, 23.
Hubbell, Nat'l Fr. Grow., Mar. '09, 26.
- Aspidiotus perniciosus. Legislation**
Burgess, Ohio Nurs. Orch. Insp. R. 5, 5, 1907.
——— N. Y. Dept. Agr. B. 11, 71c, '09.
——— N. Y. Dept. Agr. B. 27, 1050, '11.
——— Ont. Agr. Coll. B. 157, 10, 1907.
- Aspidiotus perniciosus. Limoid and kerosene for**
Soper, Rur. N. Y., 1906, 17.
- Aspidiotus perniciosus, parasites**
Felt, Am. Agric., Nov. 20, 1913, p. 493.
Felt, N. Y. Dept. Agr. B. 62, 1832, 1914.
Gossard, Ohio Hort. Soc., 1914, 104.
Hodgkiss & Parrott, J. Ec. Ent. VII, 227, 1914.
Marlatt, U. S. B. 62, 58, 1906.
Short, Am. Agric., May 20, 1911, 728.
Short, Or. Judd Farm., May 20, 1911, 844.
Smith, N. J. B. 235, 28, 1911.
Surface, Am. Agric., Oct. 18, '13, p. 325.
Surface, Or. Judd Farm., Oct. 25, 1913, 373.
Surface, Rur. N. Y., 1913, 1151.
Troop, Ind. Farm., Nov. 22, 1913, 2.

Aspidiotus perniciosus. Spraying for

- Henderson, Idaho B. 61, 3, 1908.
- Houser, Ohio B. 169, 141, 1906.
- Newell, La. Crop Pest Comm. C. 4, 38, 1905.
- Pettit, Mich. Sp. B. 37, 279, 1907.
- Symons & Gahan, Md. B. 107, 57, 1905.
- Symons, Peairs & Cory, Md. B. 148, 48, 1910.
- Symons & Weldon, Md. B. 123, 139, '07.
- Taft, Mich. R. 20, 106, 1907.
- Troop & Woodbury, Ind. R. 22, 43, '09.
- Rur. N. Y., 1908, 59.
- Aspidiotus perniciosus. Summer treatment for**
Quaintance, J. Ec. Ent. II, 130, 1909.
- Aspidiotus perniciosus, wild hosts**
Wells, Mich. Farm., Aug. 3, 1912, 90.
- Aspidiotus rapax**
Bremner, Cal. Hort. Comm. Destr. Ins., 25, 1910.
Carnes, Cal. Hort. Comm. Bien. R. 2, 210, 1907.
Davis, Ill. Ent. R. 27, 128, 1912.
Douglass, Ind. Ent. R. 4, 213, 1912.
Gahan, Md. B. 119, 7, 1907.
Quayle, Cal. B. 214, 480, 1911.
Slingerland & Crosby, Man. Fr. Ins. 180, 1914.
- Aspidiotus sp. on mountain ash**
Cooley, Mont. B. 79, 53, 1910.
- Aspidiotus tenebricosus, see Chrysomphalus**
- Aspidiotus tsugae**
Weiss, J. Ec. Ent. VII, 250, 1914.
- Aspidiotus ulmi**
Britton, Conn., B. 151, 14, 1905.
Britton, Conn., R. 5, 243, 1906.
- Aspidiotus uvae**
Baldwin, Ind. Ent. R. 5, 112, 1912.
Bentley, Tenn. Bd. Ent. R. f. 1913, 21.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 94, 1913.
Douglass, Ind. Ent. R. 4, 213, 1912.
Slingerland & Crosby, Man. Fr. Ins. 429, 1914.
Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 19.
Symons, Md. B. 101, 152, 1905.
Taylor, Mo. Fr. Exp. Sta. B. 18, 72, '08.
Zimmer, U. S. B. 97, 115, 1912.
——— U. S. Y. B., 1908, 576.

- Aspidistra* scale, *see* *Hemichionaspis aspidistrae*
- Aspidisca splendoriferella*
Jarvis, Ont. Ent. Soc. R. 37, 53, 1907.
- Aspidoglossa subangularis*
Quaintance & Jenne, U. S. B. 103, 152, 1912.
- Aspinwall's insecticide*
Smith, N. J. R. 372, 1909.
- Asterolecanium pustulans*
Howard, U. S. R. Ent., 1907, 31.
Rosenfeld, J. Ec. Ent. III, 215, 1910.
- Asterolecanium quercicola*
Smith, N. J. R., 1910, 349.
Weiss & Patterson, N. J. C. 15, 18, 1912.
- Asterolecanium variolosum*
Britton, Conn. B. 151, 4, 1905.
Britton, Conn. R. 5, 235, 1906.
Felt, N. Y. St. Mus. Mem. 8, 329, 1905.
Houser, Ohio B. 194, 181, 1908.
Sanderson, J. Ec. Ent. II, 431, 1909.
- Ataenius cognatus*
Forbes, Ill. Ent. R. 23, 183, 1905.
- Ataenius stercorator*
Forbes, Ill. Ent. R. 23, 183, 1905.
- Atanycolus* sp.
Ruggles, Minn. R. 15, 55, 1914.
- Ataxia crypta*
Morgan, U. S. B. 63, 63, 1907.
Sanderson, U. S. F. B. 223, 17, 1905.
Sanderson, U. S. B. 57, 38, 1906.
Sherman, N. C. Dept. Agr. B. 29, 6, 52, 1908.
- Athysanus bicolor*
Osborn, U. S. B. 108, 92, 1912.
- Athysanus curtisii*
Osborn, U. S. B. 108, 91, 1912.
- Athysanus exitiosus*
Hunter, Pr. Ent. Soc. Wash. XIV, 63, '12.
Osborn, U. S. B. 108, 86, 1912.
- Athysanus obtusus*
Osborn, U. S. B. 108, 93, 1912.
- Athysanus striatulus*
Smith, N. J. R., 1908, 339.
- Atomic sulphur*
Smith, N. J. R., 1910, 363.
- Atropates collinsi*
Johnson, Colo. B. 116, 11, 1906.
Sanders, U. S. C. 64, 4, 1905.
- Atropos*, *see* *Troctes*
- Atta fervens*
Forbes, Ill. Ent. R. 23, 159, 1905.
- Atta texana*
Hunter, U. S. C. 148, 1, 1912.
- Attagenus piceus*
Dean, Kans. B. 189, 229, 1913.
Dietz, Ind. Ent. R. 5, 182, 1912.
Felt, N. Y. St. Mus. B. 129, 26, 1909.
Felt, N. Y. St. Mus. B. 136, 31, 1912.
Herrick, Household Ins. 210, 1914.
Lochhead, Can. Ent., 1906, 67.
Lochhead, Syn. Ec. Ent. 70, 1914.
Morgan, U. S. Y. B., 1910, 295.
Smith, N. J. B. 203, 14, 1907.
Whitmarsh, Ohio B. 253, 118, 1912.
- Attelabus bipustulatus*
Felt, N. Y. St. Mus. Mem. 8, 516, 1906.
- Attelabus rhois*
Felt, N. Y. St. Mus. Mem. 8, 574, 1906.
- Aulacaspis pentagona*
Barre & Conradi, S. C. B. 141, 42, 1909.
Berger, Fla. R., 1907, xxxviii.
Britton & Walden, Conn. R. 13, 240, '14.
Clarke, Ala. Poly. C. 1, 5, 1906.
Clarke, Ala. Poly. B. 139, 16, 1907.
Ehrhorn, Pac. Rur. Press, LXXVI, 372, 1908.
Essig, Cal. Hort. B. II, 1-2, 124, 1913.
Felt, Gard. Mag., Jan. 1906, 270.
Felt, N. Y. R. 25, 92, 1910.
Herrick & Harned, J. Ec. Ent. II, 295, 1909.
Newell & Rosenfeld, La. Crop Pest Comm. C. 12, 7, 1907.
Quaintance, U. S. Y. B., 1905, 339.
Quaintance, Better Fr., June 1909, 18.
Slingerland & Crosby, Man. Fr. Ins. 295, 1914.
Smith, Ga. Bd. Ent. B. 17, 74, 1905.
Smith & Lewis, U. S. B. 60, 77, 1906.
Symons, Md. B. 101, 146, 1905.
Williams & Price, Ala. Poly. B. 156, 123, 1911.
Worsham, Ga. Bd. Ent. B. 30, 107, 1909.
Worsham, J. Ec. Ent. II, 207, 1909.
- Aulacaspis pentagona*, *parasites*
Howard, Ent. News, 1906, 291.
- Aulacaspis rosae*
Barre & Conradi, S. C. B. 141, 27, 1909.
Bentley, Tenn. B. v. XIX, 2, 34, 1906.
Bremner, Cal. Hort. Comm. Destr. Ins. 25, 1910.
Britton, Conn. B. 151, 11, 1905.
Britton, Conn. R. 5, 241, 1906.

- Carnes, Cal. Hort. Comm. Bien. R. 2, 202, 1907.
 Davis, Ill. Ent. R. 27, 126, 1912.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 114, 1913.
 Douglass, Ind. Ent. R. 1, 78, 1908.
 Douglass, Ind. Ent. R. 2, 111, 1910.
 Douglass, Ind. Ent. R. 4, 193, 1912.
 Essig, Pom. Jr. Ent. II, 211, 1910.
 Essig, Cal. Hort. B. II, 1-2, 125, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 228, 1905.
 Felt, N. Y. R. 26, 47, 1911.
 Gibson, Ont. Ent. Soc. R. 36, 114, 1906.
 Gillette, U. S. B. 52, 59, 1905.
 Gossard, Ohio B. 198, 74, 1908.
 Gossard, Nat'l Stockm. & Farm., Mar. 15, 1906, 11.
 Houser, Ohio B. 194, 177, 1908.
 Jarvis, Ont. Ent. Soc. R. 38, 71, 1908.
 Johannsen, Me. B. 207, 436, 1912.
 O'Kane, Inj. Ins. 260, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 336, 1914.
 Smith, N. J. B. 181, 20, 1905.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 19.
 Stene, R. I. Bd. Agr. R. 23, 35, 1908.
 Surface, Pa. D. A. Zoöl. I, 4, 1911.
 Surface, Pa. D. A. Zoöl. III, 1, 10, 1913.
 Symons, Md. B. 101, 157, 1905.
 Symons & Gahan, Md. Hort. Soc., 1904, 37, 1905.
 Taylor, Mo. Fr. Exp. Sta. B. 18, 83, '08.
- Aulacaspis zamiae**
 Gahan, Md. B. 119, 10, 1907.
- Aulacizes irrorata**
 Hooker, U. S. B. 67, 111, 1907.
 Sanderson, U. S. F. B. 223, 19, 1905.
 Sanderson, U. S. B. 57, 58, 1906.
 Sanderson, Ins. Pests, 250, 1912.
- Aulax glechomae**
 Johannsen, Me. B. 187, 8, 1911.
- Auletes tenuipes**
 Pierce, U. S. B. 73, 47, 1908.
 Pierce, U. S. B. 100, 79, 1912.
- Aulocara elliotti**
 Bruner, U. S. B. 54, 64, 1905.
- Aulocara femoratum**
 Bruner, U. S. B. 54, 64, 1905.
- Australian cockroach, see Periplaneta australasiae**
- Australian ladybird, see Novius cardinalis**
- Autographa biloba**
 Britton, Conn. R. 4, 215, 1905.
- Autographa brassicae**
 Bethune, Ont. Agr. Coll. B. 171, 17, '09.
 Britton, Conn. R. 10, 706, 1911.
 Chittenden, Ins. Inj. Veg. 140, 1907.
 Chittenden, Va. Truck Exp. Sta. B. 2, 39, 1909.
 Close & White, Md. B. 133, 195, 1909.
 Fletcher, Can. Exp. Farms B. 52, 37, '05.
 Girault, Ent. News, 1913, 55.
 Johannsen & Patch, Me. B. 195, 239, '11.
 Judson, N. Y. C. B. 292, 257, 1911.
 Metcalf, N. C. Dept. Agr. Sp. B., 62, '09.
 Newell, Pr. La. Agr. Soc. 18, 45, 1905.
 O'Kane, Inj. Ins. 178, 1914.
 Peairs, Md. Hort. Soc., 1908, 63, 1909.
 Pettit, Mich. B. 233, 170, 1906.
 Rumsey, W. Va. R. f., 1909-1910, 84.
 Rumsey & Brooks, W. Va. B. 120, 350, 1909.
 Sanderson, Ins. Pests, 361, 1912.
 Sherman, N. C. Dept. Agr. B. 32, 7, 29, 1911.
 Smith, N. C. B. 197, 26, 1908.
 Surface, Pa., D. A. Zoöl. I, 1, 22, 1911.
 Symons, Md. B. 101, 185, 1905.
 ——— U. S. Y. B., 1906, 511.
 ——— U. S. Y. B., 1907, 544.
 ——— U. S. Y. B., 1908, 571.
- Autographa californica**
 Childs, Oreg. Bien. Crop Pest R. f. 1913-1914, 184.
 Eastham, Agr. Gaz. Can. Oct. '14, 818.
 Essig, Cal. Hort. B. II, 1-2, 161, 1913.
 Hyslop, U. S. B. 95, 109, 1912.
- Autographa rogationis**
 ——— U. S. Y. B., 1906, 509.
- Automeris io**
 Felt, N. Y. St. Mus. Mem. 8, 521, 1906.
 Forbes, Ill. Ent. R. 23, 168, 1905.
 Garman, Ky. B. 133, 62, 1908.
 Gossard, Ohio B. 164, 22, 1905.
 Gossard, Ohio B. 233, 130, 1911.
 Herrick, Household Ins. 428, 1914.
 Hitchings, Me. Comm. Agr. R., 1907, 212, 1908.
 Hitchings, Me. Ent. R. 3, 8, 1908.
 Sanderson, U. S. F. B. 223, 15, 1905.
 Sanderson, U. S. B. 57, 37, 1906.
 Sherman, N. C. Dept. Agr. B. v. 29, No. 6, 51, 1908.

- Avenarius carbolineum*, *see* *Carbolineum avenarius*
- Axion pilatii*
Essig, Cal. Hort. B. II, 1-2, 212, 1913.
Isaac, Bug *vs.* Bug, 14, 1906.
- Axion plagiatus*
Essig, Cal. Hort. B. II, 1-2, 212, 1913.
- Azolla and mosquitoes*
Smith, N. J. R., 1910, 380.
- Azotus marshali*
Zimmer, U. S. B. 97, 119, 1912.
- Baccha clavata*
Sanborn, Okla. B. 98, 15, 1912.
- Baccha fascipennis*
Britton, Conn. R. 5, 230, 1906.
- Baccha lemur*
Essig, Cal. Hort. B. III, 3, 136, 1914.
- Bactrocera cucurbitae*
Back & Pemberton, J. Agric. Res. III, 269, 1914.
- Baeotomus subapterus*
Webster, U. S. C. 70, 12, 1906.
- Bag-worm*, *see* *Thyridopteryx ephemeraeformis*
- Baker's mealy bug*, *see* *Pseudococcus bakeri*
- Balaninus baculi*
Brooks, W. Va. R. f., 1909-1910, 182.
Brooks, W. Va. B. 128, 172, 1910.
- Balaninus caryae*
Barre & Conradi, S. C. B. 141, 45, 1909.
Brooks, W. Va. R. f. 1909-1910, 173.
Brooks, W. Va. B. 128, 162, 1910.
Chittenden, Nut Grow., Mar. '06, 138.
Chittenden, U. S. C. 99, 12, 1908.
Gossard, Fla. B. 79, 308, 1905.
Newell & Smith, U. S. B. 52, 70, 1905.
Worsham, Ga. Bd. Ent. B. 33, 121, '10.
Worsham, Ga. Hort. Soc., 1910, 121.
——— U. S. Y. B., 1905, 636.
——— U. S. Y. B., 1906, 513.
——— U. S. Y. B., 1908, 579.
- Balaninus confusor*
Brooks, W. Va. R. f. 1909-1910, 183.
Brooks, W. Va. B. 128, 173, 1910.
- Balaninus nasicus*
Brooks, W. Va. R. f. 1909-1910, 180.
Brooks, W. Va. B. 128, 169, 1910.
Felt, N. Y. St. Mus. Mem. 8, 583, 1906.
Pierce, U. S. B. 100, 80, 1912.
- Balaninus obtusus*
Brooks, W. Va. R. f. 1909-1910, 176.
Brooks, W. Va. B. 128, 165, 1910.
Chittenden, U. S. C. 99, 15, 1908.
- Balaninus orthorhynchus*
Brooks, W. Va. R. f. 1909-1910, 181.
Brooks, W. Va. B. 128, 171, 1910.
- Balaninus pardalus*
Brooks, W. Va. R. f. 1909-1910, 183.
Brooks, W. Va. B. 128, 175, 1910.
- Balaninus proboscideus*
Brooks, W. Va. R. f. 1904-1905, 26.
Brooks, W. Va. R. f. 1909-1910, 169.
Brooks, W. Va. B. 128, 157, 1910.
Chittenden, U. S. C. 99, 3, 1908.
Felt, N. Y. St. Mus. Mem. 8, 585, 1906.
Fulton, Wright & Gregg, Pa. B. 110, 23, 1911.
Rumsey & Brooks, W. Va. R. f. 1905-1906, 23.
——— U. S. Y. B., 1906, 513.
- Balaninus quercus*
Brooks, W. Va. R. f. 1909-1910, 178.
Brooks, W. Va. B. 128, 168, 1910.
- Balaninus rectus*
Brooks, W. Va. R. f. 1904-1905, 26.
Brooks, W. Va. R. f. 1909-1910, 171.
Brooks, W. Va. B. 128, 160, 1910.
Chittenden, U. S. C. 99, 4, 1908.
Felt, N. Y. St. Mus. Mem. 8, 585, 1906.
Fulton, Wright & Gregg, Pa. B. 110, 23, 1911.
Rumsey & Brooks, W. Va. R. f. 1905-1906, 24.
——— U. S. Y. B., 1906, 513.
- Balaninus sp.*
Brooks, W. Va. Hort. Soc. 13th R., 62, 1906.
Chittenden, Am. Agric., Oct. 28, 1905, 422.
Chittenden, Or. Judd Farm., Nov. 4, 1905, 498.
Merrill, Cal. Hort. B. I, 13, 954, 1912.
O'Kane, Inj. Ins. 368, 1914.
Surface, Pa. Dept. Agr. R. 12, 439, 1906.
——— Rur. N. Y., 1907, 166.
- Balaninus victoriensis*
Quaintance & Jenne, U. S. B. 103, 29, 1912.
- Balsa malana*
Garman, Ky. B. 133, 62, 1908.
Gossard, Ohio B. 233, 101, 1911.

- Balsam fir bark-beetle**, *see* *Tomicus bal-sameus*
- Banded ash borer**, *see* *Neoclytus capraea*
- Banded flea-beetle**, *see* *Systema taeniata*
- Banded horntail**, *see* *Urocerus abdominalis*
- Banded urographis**, *see* *Urographis fascia-tus*
- Barathra curialis**
Fletcher, Can. Ent., 1906, 381.
- Barathra occidentata**
Fletcher, Ont. Ent. Soc. R. 36, 85, 1906.
Gibson, Ont. Ent. Soc. R. 36, 107, 1906.
- Baris cuneipennis**
Pierce, U. S. B. 100, 79, 1912.
- Baris transversa**
Hinds, Ala. Poly. B. 146, 102, 1909.
- Barley insects**
Derr, U. S. F. B. 443, 44, 1911.
- Barley-straw worm**, *see* *Isosoma hordei*
- Barnacle scale**, *see* *Ceroplastes cirripedi-formis*
- Baryscapus sp.**
Russell, Pr. Ent. Soc. Wash. XV, 93, '13.
- Basilarchia archippus**
Felt, N. Y. St. Mus. Mem. 8, 559, 1906.
Gossard, Ohio B. 233, 119, 1911.
- Basilarchia astyanax**
Garman, Ky. B. 133, 62, 1908.
Gossard, Ohio B. 233, 130, 1911.
- Basilona imperialis**
Britton, Conn. R. 11, 341, 1912.
Douglass, Ind. Ent. R. 2, 50, 1910.
Felt, N. Y. St. Mus. Mem. 8, 677, 1906.
Patch, Me. B. 162, 358, 1908.
- Batrachedra rileyi**
Forbes, Ill. Ent. R. 23, 176, 1905.
Tucker, Can. Ent., 1911, 24, 28.
——— U. S. Y. B., 1906, 510.
- Bathymetris sp. on grapeberry moth**
Johnson & Hammar, U. S. B. 116, 46, 1912.
- Batyle suturalis**
Felt, N. Y. St. Mus. Mem. 8, 663, 1906.
- Bean aphid**, *see* *Aphis rumicis*
- Bean insects**
Clay, Tex. Agr. & Statis. R. 1905, 263.
- Bean ladybird**, *see* *Epilachna corrupta*
- Bean leaf-beetle**, *see* *Cerotoma trifurcata*
- Bean leaf-roller**, *see* *Eudamus proteus*
- Bean thrips**, *see* *Heliothrips fasciatus*
- Bean weevil**, *see* *Bruchus obtectus*
- Bedbug**, *see* *Cimex lectularia*
- Bees and disease**
Wheeler, Amer. Jr. Trop. Dis. 11, 160, 1914.
- Bees and flowers**
Britton and Viereck, Conn. R. 5, 207, 1906.
- Beet-aphis**, *see* *Pemphigus betae*
- Beet army worm**, *see* *Laphygma exigua*
- Beet carrion beetle**, *see* *Silpha opaca*
- Beet chlorops**, *see* *Chlorops assimilis*
- Beet leaf-hopper**, *see* *Eutettix tenella*
- Beet leaf-miner**, *see* *Pegomyia vicina*
- Beet maggot**, *see* *Pegomyia vicina*
- Beet root-aphis**, *see* *Tychea brevicornis*
- Beet root-aphis**, *see* *Pemphigus betae*
- Bellamira scalaris**
Felt, N. Y. St. Mus. Mem. 8, 467, 1906.
- Belostoma americanum**
Felt, N. Y. R. 21, 104, 1906.
Herrick, Household Ins. 417, 1914.
- Belted chion**, *see* *Chion cinctus*
- Belvosia bifasciata**
Britton, Conn. R. 11, 341, 1912.
Howard & Chittenden, U. S. C. 110, 5, 1909.
- Belvosia unifasciata**
Garman, Ky. B. 137, 436, 1908.
- Bembecia marginata**
Adams, Ark. B. 92, 15, 1907.
Caesar, Ont. Ent. Soc. R. 42, 31, 1912.
Caesar, Ont. Ent. Soc. R. 43, 81, 1913.
Caesar, Ont. Ent. Soc. R. 44, 52, 1914.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 109, 1913.
Gossard, Ohio B. 198, 74, 1908.
Gossard, Ohio B. 233, 145, 1911.
Lawrence, Ent. News, 1905, 117.
Nicholson, Okla. B. 69, 14, 1905.
O'Kane, Inj. Ins. 234, 1914.
Sanderson, Ins. Pests, 459, 1912.
Slingerland & Crosby, Man. Fr. Ins. 335, 1914.
Symons, Md. B. 101, 157, 1905.
Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 161.
——— Pac. Rur. Press LXXVII, 63, '09.
- Bembex belfragei**
Hine, La. Crop. Pest Comm. C. 6, 27, 1906.
- Benacus griseus**
Felt, C. Gentl., 1905, 689.

Beneficial insects

- Gable, Nebr. Hort. Soc., 1909, 129.
 Hinds, Ala. Hort. Soc. R. 11, 69, 1914.
 Perkins, Vt. Hort. Soc. 10th R. 102, '13.
 Sanderson, Ins. Pests, 9, 1912.
 Smith, Cal. Cult. XLII, 195, 1914.
 Stedman, Mo. Hort. Soc., 1905, 285.
 Titus, Deseret Farm., Jan. 4, 1908, 5.
 Troop, Ind. Farm., Aug. 17, 1907, 1.
 Volek, Cal. Cult., XXXVIII, 195, 1912.
 Weed, N. Eng. Farm., Feb. 25, 1911, 8.
 Weldon, Farm. Guide, May 1, 1909, 18.
- Benta malanogrammos**
 Felt, N. Y. St. Mus. Mem. 8, 676, 1906.
- Bethylus sp. on codling moth**
 Quaintance, U. S. Y. B., 1907, 443.
- Bibio albipennis**
 Cooley, Mont. B. 64, 44, 1906.
 Girault, Ent. News, 1908, 76.
- Bibio femorata**
 Girault, Can. Ent., 1905, 322.
- Bibio nervosus**
 Wilson, Oreg. Bien. Crop Pest R. f., 1913-1914, 199.
- Bibio sp.**
 Swenk, Nebr. St. Bd. Agr. R. f., 1910, 364.
- Big bed bugs, see Conorhinus sanguisugus**
- Bill-bugs, see Sphenophorus spp.**
- Biomyia georgiae**
 Tothill, Ent. Soc. Ont. R. 43, 58, 1913.
- Biorhiza forticornis**
 Felt, N. Y. St. Mus. Mem. 8, 626, 1906.
- Birds and insects.**
 Beal, U. S. Y. B., 1908, 343.
 Bryant, Pom. Jr. Ent. IV, 807, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 25, 1905.
 Felt, N. Y. Fr. Grow. Assoc., 1908, 141.
 Felt, Pr. N. Y. Fr. Grow. Assoc., 6th East Meet., 139, 1908.
 Forbush, Useful Birds & Their Protection, Boston, 1907.
 Garman, Ky. Bur. Agr. Bien. R. 17, 216, 1908.
 Hall, N. Y. Dept. Agr. B. 37, 1392, 1912.
 Henshaw, U. S. Biol. Survey, C. 56, 1907.
 Hewitt, Agr. Gaz. Can., June 1914, 429.
 LeRoy, Mich. Farm., July 11, 1914, v. 143, p. 27.
 McAtee, U. S. Y. B., 1912, 397.
 Nice, J. Ec. Ent. III, 295, 1910.
 Surface, Pa. Dept. Agr. B. 137, 187, '05.
- Surface, Pa. Dept. Agr. R. 11, 317, 1905.
 Woollen, Better Fr., May 1912, 70.
 Wylie, Ohio Bd. Agr. R. 63, 1908, 577.
- Bisulphide of carbon, see Carbon bisulphide**
- Biting house fly, see Stomoxys calcitrans**
- Black ant, see Monomorium minutum**
- Black apple aphid, see Aphis sorbi**
- Black beetle, see Blatta orientalis**
- Blackberry gall-maker, see Diastrophus**
- Blackberry insects**
 Lawrence, Better Fr., Dec. 1912, 16.
- Blackberry leaf-miner, see Metallus rubi**
- Black blister beetle, see Epicauta pennsylvanica**
- Black carpet beetle, see Attagenus piceus**
- Black cherry aphid, see Myzus cerasi**
- Black cutworm, see Agrotis ypsilon**
- Black flies, see Simulium**
- Black gadfly, see Tabanus atratus**
- Blackheaded cranberry worm, see Rhopobota vacciniana**
- Black Hills beetle, see Dendroctonus ponderosae**
- Black Leaf 40**
 Smith, N. J. R., 1910, 366.
- Black locust insects**
 Cotton, Ohio Nurs. Orch. Insp. B. 7, '06.
- Black peach-aphid, see Aphis persicae-niger**
- Black scale, see Saissetia oleae**
- Black-striped ear-fly, see Chrysops vittatus**
- Black-striped gadfly, see Tabanus nigrovittata**
- Black turpentine beetle, see Dendroctonus terebrans**
- Black widow, see Latrodectus**
- Blacus fuscipes**
 Gossard, Ohio B. 264, 30, 1913.
- Blapstinus brevicollis**
 Morrill, Ariz. Comm. Agr. & Hort. R. 6, 36, 1914.
 ——— U. S. Y. B., 1908, 571.
- Blapstinus metallicus**
 Hooker, U. S. B. 67, 110, 1907.
- Blapstinus pimalis**
 Morrill, Ariz. Comm. Agr. & Hort. R. 6, 36, 1914.
- Blapstinus sp.**
 Adams, Cal. Cult., XLI, 258, 1913.

Blastophaga grossorum

- Chambers, Pac. Rur. Press, LXXIV, 294, 1907.
 Chambers, Pac. Rur. Press, LXXV, 37, 1908.
 Essig, Cal. Hort. B. II, 1-2, 268, 1913.
 Hammond, Cal. Fr. Grow., Oct. 26, 1912, 4.
 Rixford, Pac. Rur. Press LXXV, 86, '08.
 Rixford, Cal. Cult. XXVI, 419, 1911.
 Rixford, Pac. Rur. Press, LXXXI, 292, 1911.
 Rixford, J. Ec. Ent. V, 349, 1912.
 Rixford, Pac. Rur. Press, LXXXIV, 28, 1912.
 Roeding, Pac. Rur. Press LXXIV, 390, 1907.
 Roeding, Cal. Cult. XXXIV, 99, 1910.
 Roeding, Cal. Cult. XXXV, 659, 1910.
 Starnes & Monroe, Ga. B. 77, 101, '07.
 Swingle, Cal. Fr. Grow., Dec. 14, '10, 4.
 Swingle & Rixford, Pac. Rur. Press, LXXX, 498, 1910.
 Tribble, Pac. Rur. Press, LXXXIII, 52, 1912.
 ——— Pac. Rur. Press, LXXIV, 229, 1907.
 ——— Pac. Rur. Press, LXXIV, 338, 1907.
 ——— Pac. Rur. Press, LXXXVI, 517, 1913.

Blastophaga sp.

- Howard, S. W. Stockm., Nov. 11, 1910, 13.
 Morrill, S. W. Stockm., May 2, 1913, 15.

Blatta orientalis

- ✓ Dean, Kans. B. 189, 233, 1913.
 Felt, N. Y. St. Mus. B. 129, 32, 1909.
 ✓ Felt, N. Y. St. Mus. B. 136, 37, 1912.
 Felt, N. Y. R. 27, 93, 1912.
 ✓ Herrick, Household Ins. 136, 1914.
 ✓ Marlatt, U. S. C. 51, Rev., 8, 1908.
 ✓ Smith, N. J. B. 203, 4, 1907.
 ✓ Whitmarsh, Ohio B. 253, 124, 1912.

Blatella germanica

- Bethune, Ont. Agr. Coll. R. 35, 30, '10.
 Britton, Conn. R. 4, 215, 1905.
 Britton, Kans. B. 189, 234, 1913.
 Felt, N. Y. St. Mus. B. 129, 33, 1909.
 Felt, N. Y. St. Mus. B. 136, 38, 1912.
 Herms & Nelson, Amer. Jr. Pub. Health, IX, 929, 1913.

Herrick, Household Ins. 124, 1914.

Longfellow, Amer. Jr. Pub. Health, IX, 58, 1913.

Marlatt, U. S. C. 51, Rev. 9, 1908.

Morrill, S. W. Stockm., July 3, 1914, 10.

Phillips, U. S. B. 52, 96, 1905.

Smith, N. J. B. 203, 5, 1907.

Surface, Pa. D. A. Zoöl. III, 1, 20, 1913.

Symons, Md. B. 101, 191, 1905.

Washburn, Minn. R. 14, 80, 1912.

Whitmarsh, Ohio B. 253, 123, 1912.

Blatella germanica eggs

Girault, Ent. News, 1911, 14.

Bleaching powder

U. S. D. A. Ins. & Fung. Bd., Ins. 2, p. 25, 1914.

Blepharidea vulgaris

Howard & Fiske, U. S. B. 91, 304, 1911.

Blepharipa scutellata

Fiske, Mass. For. R. 6, 91, 1910.

Howard & Fiske, U. S. B. 91, 142, 158, 213, 1911.

Kirkland, Mass. G. & B. T. R. 4, 61, '09.

Blepharipa sp.

Howard, Mass. For. R. 7, 95, 1911.

Blissus leucopterus

Baldwin, Ind. Ent. R. 6, 37, 1914.

Ball & Leidigh, U. S. F. B. 322, 21, '08.

Barre & Conradi, S. C. B. 141, 30, 1909.

Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 55.

Borman, Kans. Farm., Dec. 13, 1913, 4.

Bruner, Nebr. Ent. R. f. 1907-1908, 9.

Caesar, Ont. Ent. Soc. R. 42, 33, 1912.

Center, Prai. Farm., Oct. 1, 1911, 18.

Cooley, Mont. B. 88, 87, 1912.

Cooley, Mont. B. 92, 56, 1912.

Cooley, Mont. B. 98, 124, 1914.

Dean, Kans. Agr. Educ. I, 4, 19, 48, 1909.

Dean & McColloch, Kans. Farm., May 24, 1913, 4.

Dean & McColloch, Kans. C. 29.

Derr, U. S. F. B. 443, 45, 1911.

Dillon, Kans. Farm., Dec. 10, '10, 23.

Douglass, Ind. Ent. R. 1, 86, 1908.

Duggar & Gauthen, Ala. Poly. B. 179, 124, 1914.

Essig, Cal. Hort. B. II, 1-2, 148, 1913.

Fields, Okla. R. 15, 50, 1906.

Forbes, Ill. Ent. R. 23, 57, 1905.

Forbes, Ill. Ent. R. 24, 30, 1908.

Blissus leucopterus (*Cont'd*)

- Forbes, Prai. Farm., June 1, 1911, 4.
 Forbes, Or. Judd Farm., Jan. 6, 1912, 12.
 Garcia, N. Mex. B. 68, 30, 1908.
 Garman, Ky. B. 145, 292, 1909.
 Gossard, Ohio B. 198, 32, 1908.
 Gossard, O. Farm., July 9, 1910, 32.
 Gossard, Ohio P. B. 314, 1910.
 Gossard, J. Ec. Ent. IV, 207, 1911.
 Gossard, Ohio B. 233, 58, 75, 1911.
 Gossard, Ohio C. 115, 1911.
 Gossard, O. Farm., Aug. 12, '11, p. 113.
 Gossard, O. Farm., Aug. 26, 1911, 153.
 Gossard, Ohio B. 323, 1911.
 Gossard, Ohio B. 348, 1912.
 Gossard, O. Farm., Oct. 17, 1914, 342.
 Haseman, Ind. Farm., June 20, '08, 2.
 Haseman, Mo. P. B. 5, 1912.
 Haseman, Mo. Bd. Agr. R. 44, 281, '12.
 Haseman, Farm & Ranch, Dec. 7, '12, 5.
 Haseman, Mo. C. 62, 211, 1913.
 Haseman, Mo. P. B. 41, 1914.
 Haseman, Mo. P. B. 47, 1914.
 Haseman, Mo. P. B. 48, 1914.
 Headlee, Kans. Farm., June 11, '08, 681.
 Headlee, Kans. P. B. 161, 1908.
 Headlee, Kans. R. 21, xlviii, 1908.
 Headlee, Kans. Farm., June 11, '10, 1.
 Headlee, Kans. Farm., Oct. 22, '10, 9.
 Headlee & Ten Eyck, Kans. P. B. 185, 1910.
 Headlee, Kans. Farm., Jan. 21, '11, 10.
 Headlee, Kans. Farm., July 29, '11, 4.
 Headlee & McColloch, Kans. B. 191, 289, 1913.
 Helmick, Iowa Agric., May, 1914, 462.
 Hudson, Ont. Ent. Soc. R. 43, 46, 1913.
 Hudson, Can. Exp. Farms Ent. C. 3, 7, 1914.
 Hunter, Kans. Farm., July 11, '06, 800.
 Johannsen, Me. B. 187, 9, 1911.
 Jones, O. Farm., Sept. 26, 1914, 272.
 Kelly & Parks, U. S. B. 95, 23, 1911.
 Kohler, Iowa Agric., Nov., 1905, 86.
 Lochhead, Syn. Ec. Ent. 40, 1914.
 Morgan, Tenn. Bd. Ent. R. f., '10, 55.
 Newell, Tex. Stockm. Farm., June 4, 1913, 4.
 O'Kane, Inj. Ins. 193, 1914.
 Osborn, U. S. B. 52, 50, 1905.
 Parker, Kans. C. 5, 1909.
 Parker, Kans. Farm., Jan. 29, '10, 2.
 Parker, Kans. Farm., Aug. 27, '10, 10.
 Parker, Kans. B. 184, 1910.
 Peck, Nebr. Farm., Sept. 7, 1905, 835.
 Price, Va. C. 7, 69, 1909.
 Sanborn, Okla. B. 100, 63, 1912.
 Sanborn, Okla. R. 19-20, 45, 1912.
 Sanderson, Ent. News, 1906, 361.
 Sanderson, Ins. Pests, 89, 1912.
 Scober, Kans. Farm., Feb. 15, 1913, 12.
 Sherman, N. C. Dept. Agr. B. 26, 5, 30, 1905.
 Sherman, N. C. Dept. Agr. B. 35, 5, 29, 1914.
 Sibley, Prai. Farm., LXXVIII, 358, '06.
 Stedman, Mo. Bd. Agr. R. 38, 292, '06.
 Swenk, Nebr. Bd. Agr. R. f. 1908, 287.
 Swenk, Nebr. Bd. Agr. R. f. 1910, 362.
 Swenk, Nebr. Ent. B. 1, 71, 1913.
 Troop, Ind. R. 27, 48, 1914.
 Washburn, U. S. B. 52, 56, 1905.
 Webster, U. S. B. 69, 9, 1907.
 Webster, U. S. C. 113, 1, 1909.
 ——— Kans. Farm., May 17, '06, 531.
 ——— U. S. Y. B., 1905, 635.
 ——— U. S. Y. B., 1906, 509.
 ——— U. S. Y. B., 1907, 542.
 ——— U. S. Y. B., 1908, 568.
Blissus leucopterus and sheep
 Jamison, Rur. N. Y., 1905, 19.
Blissus leucopterus, burning
 Dean & McColloch, Kans. Farm., Sept. 27, 1913, 4.
 Headlee, Kans. C. 16, Nov., 1910.
 Scobee, Kans. Farm., Sept. 27, '13, 5.
Blissus leucopterus, disease
 Billings & Glenn, U. S. B. 107, 1911.
 Headlee & McColloch, Kans. B. 191, 308, 1913.
Blissus leucopterus, insects mistaken for
 Webster, U. S. B. 69, 32, 1907.
Blissus leucopterus, parasite
 Headlee & McColloch, Kans. B. 191, 308, 1913.
 McColloch, Science, Sept. 12, 1913, 367.
 McCulloch, Kans. Farm., Sept. 13, 1913, 7.
 McCulloch, J. Ec. Ent. VI, 424, 1913.
Blister beetles, see Epicauta and Macro-
basis
Blister beetles
 Hansen, S. Dak. B. 141, 71, 1913.
 Herrick, Rur. N. Y., 1911, 785.

- Jarvis, Conn. Storrs B. 56, 246, 1909.
 Lochhead, Syn. Ec. Ent. 79, 1914.
 Lovett, Oreg. Coll. B. 91, 6, 1913.
 O'Kane, Inj. Ins. 144, 1914.
 Sanderson, Ins. Pests, 343, 1912.
 Smith, N. J. Ent. C. 35.
 Smith, N. J. R., 1911, 415.
 Surface, Pa. D. A. Zoöl. V, 12, 396, 1908.
- Blister mite on walnut**
 Smith, Smith & Ramsey, Cal. B. 231, 385, 1912.
- Blood-sucking cone-nose, see** *Conorhinus sanguisuga*
- Blow-fly, see** *Calliphora*
- Blue bugs, see** *Argas miniatus*
- Bobwhite, insect food of**
 Nice, J. Ec. Ent. III, 295, 1910.
- Body louse, see** *Pediculus vestimenti*
- Bogart's sulphur compound**
 Smith, N. J. R., 1908, 371.
- Boletotherus bifurcus**
 Britton, Conn. R. 7, 337, 1908.
 Felt, N. Y. St. Mus. Mem. 8, 498, 1906.
- Boll weevil, see** *Anthonomus grandis*
- Boll worm, see** *Heliothis obsoleta*
- Bombus fertilizing clover**
 Washburn, J. Ec. Ent. IV, 140, 1911.
- Book-louse, see** *Troctes divinatoria*
- Boopedon nubilum**
 Forbes, Ill. Ent. R. 23, 212, 1905.
- Boophilus annulatus, see** *Margaropus*
- Borax and flies**
 Moses, Iowa Home., Nov. 26, '14, 1961.
- Bordeaux,**
 Atwood, N. Y. Dept. Agr. Hort. B. I, 5, 1907.
 Smith, N. J. B. 213, 32, 1908.
 ——— U. S. D. A. Insecticide Decision 6, 1912.
 ——— U. S. D. A. Ins. & Fung. No. 2, 1914.
- Bordeaux and arsenate of lead**
 Stone & Fernald, Mass. B. 123, 11, 1908.
 ——— U. S. D. A. Ins. & Fung. No. 1, 1914.
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 1, p. 7, 1914.
- Bordeaux and arsenite of lime**
 Stone & Fernald, Mass. B. 123, 11, 1908.
- Bordeaux and arsenite of soda**
 Stewart, Eustace & Sirrine, N. Y. St. B. 279, 220, 1906.
- Bordeaux and kerosene**
 Parrott, N. Y. St. C. 9, 9, 1908.
- Bordeaux and Paris green**
 Smith, Ga. Bd. Ent. B. 16, 48, 1905.
 Stone & Fernald, Mass. B. 123, 11, 1908.
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 1, p. 8, 1914.
- Bordeaux-arsenical mixture**
 Parrott, Beach & Woodworth, N. Y. St. B. 247, 66, 1904.
 Parrott, Beach & Sirrine, N. Y. St. B. 262, 41, 1905.
- Bordeaux labels**
 ——— U. S. D. A. Ins. & Fung. Bd. Ins. 1, p. 6, 1914.
- Bordeaux paste**
 U. S. D. A. Ins. & Fung., Ins. 1, p. 5, '14.
- Borers**
 Felt, Gard. Mag., Sept. 1905, 82.
 Gossard, O. Farm., July 29, 1911, p. 75.
 Peters, Wyo. Bd. Hort. 4th Bien. R., 65, 1911-1912.
 Smith, N. J. B. 181, 28, 1905.
 Todd, Prai. Farm., July 1, 1909, 5.
 Wells, Mich. Farm., May 23, 1908, v. 53, p. 533.
- Borowax**
 Smith, N. J. R., 1911, 435.
- Bothrideres geminatus**
 Felt, N. Y. St. Mus. Mem. 8, 505, '06.
- Botis repetitalis**
 ——— U. S. Y. B., 1906, 510.
- Botrytis bassiana, see** *Porthetria dispar* (disease of).
- Bowker's disparene**
 Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 11, 1907.
- Box-elder aphid, see** *Chaitophorus negundinis*
- Box-elder plant-bug, see** *Leptocoris trivittatus*
- Brachyacantha ursina**
 Britton, Conn., B. 181, 9, 1914.
- Brachycolus tritici**
 Cooley, Mont. B. 88, 89, 1912.
 Cooley, Mont. B. 92, 57, 1912.
- Brachys aerea**
 Felt, N. Y. St. Mus. Mem. 8, 512, 1906.
 Patch, Me. B. 148, 270, 1907.
 Patch, Me. B. 162, 362, 1908.
- Brachys ovata**
 Felt, N. Y. St. Mus. Mem. 8, 513, 1906.

- Brachysticha fidae**
Quaintance & Shear, U. S. F. B. 284, 10, 1907.
- Brachystola magna**
Sanderson, U. S. F. B. 223, 12, 1905.
Sanderson, U. S. B. 57, 24, 1906.
- Brachytarsus alternatus**
Pierce, U. S. B. 73, 47, 1908.
Pierce, U. S. B. 100, 74, 1912.
- Brachytarsus variegatus**
Forbes, Ill. Ent. R. 23, 194, 1905.
Watson, Fla. R., 1913, lxxi.
- Brackenridgia acerifoliella**, *see* *Incurvaria*.
- Bracon anthonomi**
Brooks, W. Va. R. f. 1909-1910, 147.
Brooks, W. Va. B. 126, 123, 1910.
- Bracon dorsator**
Brooks, W. Va. R. f. 1904-1905, 23.
Brooks, W. Va. B. 100, 240, 1906.
Hunter & Hinds, U. S. B. 51, 146, 1905.
Johnson & Hammar, U. S. B. 116, 48, 1912.
Pierce, U. S. B. 73, 29, 38, 1908.
Quaintance & Jenne, U. S. B. 103, 148, 1912.
- Bracon eurygaster**
Chittenden, U. S. C. 130, 7, 1910.
- Bracon hyslopi**
Hyslop, U. S. B. 95, 104, 1912.
- Bracon lixi**
Quaintance & Jenne, U. S. B. 103, 148, 1912.
- Bracon mellitor**
Brooks, W. Va. R. f., 1904-1905, 23.
Brooks, W. Va. B. 100, 240, 1906.
Girault, U. S. B. 68, 45, 1907.
Hunter & Hinds, U. S. B. 51, 145, 1905.
Hunter & Pierce, U. S. B. 114, 142, 1912.
Johnson & Hammar, U. S. B. 116, 48, 1912.
Pierce, J. Ec. Ent. I, 119, 1908.
Pierce, U. S. B. 73, 29, 38, 1908.
Pierce, U. S. B. 100, 53, 1912.
Quaintance & Jenne, U. S. B. 103, 148, 1912.
- Bracon scrutator**
Johnson & Hammar, U. S. B. 116, 46, 1912.
- Bracon sp.**
Johannsen & Patch, Me. B. 195, 243, '11.
- Bracon sp. on beet web-worm**
Chittenden, U. S. B. 109, 21, 1911.
- Bracon sp. on cherry sawfly**
Foster, U. S. B. 116, 78, 1913.
- Bracon xanthostigma**
Pierce, U. S. B. 73, 29, 38, 1908.
- Bran and arsenate bait**
Smith, N. J. B. 213, 13, 1908.
- Branch borer**, *see* *Polycaon confertus*
- Braula caeca**
Surface, Pa. D. A. Zool. III, 1, 5, 1913.
- Breeding cages**
Hood, J. Ec. Ent. II, 121, 1909.
- Bristly rose slug**, *see* *Cladius pectinicornis*
- Broad-bean weevil**, *see* *Bruchus rufimanus*
- Broad-horned flour-beetle**, *see* *Echocerus cornutus*
- Broad-necked prionus**, *see* *Prionus laticollis*
- Broad-nosed grain weevil**, *see* *Caulophilus latinasus*
- Brochymena annulata**
Felt, N. Y. St. Mus. Mem. 8, 588, 1906.
Slingerland & Crosby, Man. Fr. Ins. 208, 1914.
- Brochymena arborea**
Felt, N. Y. St. Mus. Mem. 8, 591, 1906.
- Brochymena quadripustulata**
Felt, N. Y. St. Mus. Mem. 8, 590, 1906.
- Bronze apple-tree weevil**, *see* *Magdalis aenescens*
- Bronze birch borer**, *see* *Agrilus anxius*
- Bronze cutworm**, *see* *Nephelodes minians*
- Brown apple aphid**, *see* *Aphis sorbi*
- Brown plum aphid**, *see* *Aphis setariae*
- Brown spider beetle**, *see* *Ptinus brunneus*
- Brown-tail fungus**, *see* *Euproctis chrysorrhoea* (Fungus on)
- Brown-tail moth**, *see* *Euproctis chrysorrhoea*
- Bruchidae—Host plants of**
Cushman, J. Ec. Ent. IV, 489, 1911.
- Bruchidae, names of species**
Chittenden, U. S. B. 82, 92, 1911.
- Bruchidae, parasites of**
Cushman, J. Ec. Ent. IV, 489, 1911.
- Bruchophagus funebris**
Britton, Conn. R. 10, 709, 1911.
Dean, Kans. Agr. Educ. I, 4, 84, 1909.
Essig, Cal. Hort. B. II, 10, 696, 1913.
Essig, Cal. Hort. B. II, 1-2, 267, 1913.
Folsom, Ill. B. 134, 125, 1909.
Folsom, Ill. Ent. R. 25, 53, 1909.
Gossard, Ohio B. 233, 77, 1911.
Headlee, Kans. B. 155, 340, 1908.

- Lochhead, Syn. Ec. Ent. 99, 1914.
 Morrill, J. Ec. Ent. VI, 194, 1913.
 Morrill, S. W. Stockm., June 20, '13, 10.
 O'Kane, Inj. Ins. 220, 1914.
 Pettit, Mich. B. 258, 286, 1910.
 Sanderson, Ins. Pests, 214, 1912.
 Swenk, Nebr. Ent. B. 1, 89, 1913.
 Urbahns, U. S. F. B. 636, 1, 1914.
 Washburn, Minn. R. 11, 22, 1906.
 Washburn, U. S. B. 60, 85, 1906.
 Washburn, Minn. R. 14, 52, 1912.
 Webster, U. S. C. 69, 7, 1906.
 Webster, U. S. Y. B., 1908, 375.
 Westgate & Hillman, U. S. F. B. 455, 38, 1911.
 Westgate, McKee & Evans, U. S. F. B. 495, 29, 1912.
 ——— U. S. Y. B., 1905, 635.
 ——— U. S. Y. B., 1907, 543.
 ——— U. S. Y. B., 1908, 569.
- Bruchophagus herrerae**
 Hunter & Hinds, U. S. B. 51, 146, 1905.
 Hunter & Pierce, U. S. B. 114, 141, 1912.
 Pierce, U. S. B. 73, 29, 36, 1908.
- Bruchus chinensis**
 Barre & Conradi, S. C. B. 141, 31, 1909.
 Chittenden, Ins. Inj. to Veg. 104, 1907.
 Chittenden, U. S. B. 96, 83, 1912.
 Dawson, Nebr. Bd. Agr. R. f., 1909, 249.
 Duvel, U. S. B. 54, 49, 1905.
 Gee, Prog. Farm., June 29, 1912, 741.
 Newell, Farm & Ranch, June 1, 1907, 16.
 Newell, La. Plant., Apr. 18, 1908, 249.
 Newell, Farm & Ranch, May 2, 1908, 7.
 O'Kane, Inj. Ins. 366, 1914.
 Popenoe, Kans. Farm., Sept. 27, 1907.
 Sanborn, Okla. B. 100, 41, 1912.
 Sanderson, Ins. Pests, 311, 1912.
 Sherman, Prog. Farm., June 25, '08, 15.
 Swenk, Nebr. Bd. Agr. R. f., 1909, 249.
- Bruchus compressicornis**
 Pierce, U. S. B. 100, 74, 1912.
- Bruchus exiguus**
 Pierce, U. S. B. 73, 48, 1908.
 Pierce, U. S. B. 100, 73, 1912.
- Bruchus obtectus**
 Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 51.
 Bethune, Ont. Agr. Coll. B. 171, 12, '09.
 Bremner, Cal. Hort. Comm. Destr. Ins. 14, 1910.
 Chandler, Mo. B. 102, 268, 1912.
- Chittenden, Ins. Inj. Veg. 102, 1907.
 Dawson, Nebr. Bd. Agr. R. f., 1909, 247.
 Duvel, U. S. B. 54, 49, 1905.
 Essig, Cal. Cult. XXXVI, 520, 1911.
 Essig, Cal. Hort. B. II, 1-2, 236, 1913.
 Felt, N. Y. St. Mus. B. 129, 41, 1909.
 Felt, N. Y. St. Mus. B. 136, 47, 1912.
 Fletcher, Can. Exp. Farms B. 52, 1905.
 Fulton, Wright & Gregg, Pa. B. 110, 19, 1911.
 Gibson, Can. Ent., 1906, 365.
 Gibson, Ont. Ent. Soc. R. 37, 116, 1907.
 Herrick, Household Ins. 269, 1914.
 Lochhead, Syn. Ec. Ent. 77, 1914.
 Lovett, Oreg. Coll. B. 91, 15, 1913.
 Morgan, Tenn. Bd. Ent. R. f., 1910, 47.
 O'Kane, Inj. Ins. 365, 1914.
 Pettit, Mich. B. 233, 156, 1906.
 Pettit, Mich. B. 258, 276, 1910.
 Pierce, U. S. B. 100, 74, 1912.
 Price, Va. C. 7, 54, 1909.
 Sanborn, Okla. B. 100, 11, 1912.
 Sanderson, Ins. Pests, 309, 1912.
 Smith, N. C. B. 197, 15, 1908.
 Surface, Pa. D. A. Zoöl. I, 1, 20, 1911.
 Surface, Pa. D. A. Zoöl. I, 4, 188, 1911.
 Swenk, Nebr. Bd. Agr. R. f., 1909, 247.
 ——— Pac. Rur. Press LXXXIV, 419, 1912.
 ——— U. S. Y. B., 1907, 543.
 ——— U. S. Y. B., 1908, 570.
- Bruchus ochracea**
 Pierce, U. S. B. 74, 1912.
- Bruchus pisorum**
 Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 51.
 Bethune, Farm. World, Can., '06, 788.
 Bethune, Ont. Agr. Coll. B. 171, 29, '09.
 Bethune, Ont. Ent. Soc. R. 39, 132, '09.
 Chittenden, Ins. Inj. Veg. 99, 1907.
 Cooley, Mont. B. 88, 88, 1912.
 Cooley, Mont. B. 92, 61, 1912.
 Dawson, Nebr. Bd. Agr. R. f., '09, 248.
 Essig, Cal. Hort. B. II, 1-2, 238, 1913.
 Felt, N. Y. St. Mus. B. 129, 41, 1909.
 Felt, N. Y. St. Mus. B. 136, 47, 1912.
 Fletcher, Can. Exp. Farms B. 52, 23, '05.
 Fletcher, Farm. World, Can., '05, 300.
 Herrick, Household Ins. 269, 1914.
 Johnson, Farm. Guide, Mar. 7, '08, 24.
 Johnson, Cal. Fr. Grow., Jan. 8, '10, 13.
 Lochhead, Ont. Ent. Soc. R. 36, 129, '06.

Bruchus pisorum (*Cont'd*)

- Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 22, 1906.
 Lochhead, Syn. Ec. Ent. 77, 1914.
 Lovett, Oreg. Coll. B. 91, 15, 1913.
 Miller, Mo. Bd. Agr. B. 9, 26, 1909.
 Morgan, Tenn. Bd. Ent. R. f., 1910, 47.
 O'Kane, Inj. Ins. 368, 1914.
 Pettit, Mich. B. 233, 192, 1906.
 Pettit, Mich. B. 258, 305, 1910.
 Sanborn, Okla. B. 100, 43, 1912.
 Sanderson, Ins. Pests, 305, 1912.
 Sherman, Prog. Farm., Nov. 22, '06, 3.
 Smith, N. C. B. 197, 47, 1908.
 Swenk, Nebr. Bd. Agr. R. f., 1909, 248.
 Titus, Deseret Farm., Apr. 3, 1909, 14.
 ——— C. Gentl., 1906, 920.
 ——— Pac. Rur. Press LXXXIV, 443, 1912.
 ——— U. S. Y. B., 1907, 543.
 ——— U. S. Y. B., 1908, 570.

Bruchus quadrimaculatus

- Chittenden, Ins. Inj. Veg. 105, 1907.
 Dawson, Nebr. Bd. Agr. R. f. '09, 249.
 Duvel, U. S. B. 54, 49, 1905.
 O'Kane, Inj. Ins. 366, 1914.
 Pettit, Mich. B. 244, 215, 1907.
 Pettit, Mich. B. 258, 277, 1910.
 Sanborn, Okla. B. 100, 12, 1912.
 Sanderson, Ins. Pests, 312, 1912.
 Swenk, Nebr. Bd. Agr. R. f., 1909, 249.

Bruchus rufimana

- Chittenden, U. S. B. 96, 59, 1911.
 Essig, Cal. Hort. B. II, 1-2, 239, 1913.
 Sanderson, Ins. Pests, 313, 1912.

Bruchus sallaei

- Pierce, U. S. B. 100, 73, 1912.

Bruchus spp.

- Conradi, Tex. B. 89, 3, 1907.

Bryobia pratensis

- Ball & Titus, Deseret Farm., May 6, 1911, 2.
 Bremner, Cal. Hort. Comm. Destr. Ins., 4, 1910.
 Caesar, Ont. Ent. Soc. R. 43, 79, 1913.
 Cooley, Mont. B. 98, 123, 1914.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 121, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 24, 1907.
 Essig, Cal. Hort. B. II, 1-2, 6, 1913.
 Felt, Gard. Mag., Mar. 1909, 124.

Garman, Ky. B. 125, 44, 1906.

Gillette, Colo. B. 114, 12, 1906.

Gossard, Ohio B. 233, 80, 111, 1911.

Herrick, Household Ins. 352, 1914.

O'Kane, Inj. Ins. 208, 321, 1914.

Parrott, N. Y. Fr. Grow. Assoc., '12, 210

Pease, Cal. Hort. Comm. C., Nov. '05, 8.

Pettit, Mich. B. 258, 284, 1910.

Pettit, Mich. Farm., June 13, 1914, p. 610.

Quayle, Cal. B. 234, 501, 1912.

Sanderson, Ins. Pests, 209, 1912.

Slingerland & Crosby, Man. Fr. Ins. 206, 1914.

Swenk, Nebr. Bd. Agr. R. f. '08, 305.

Swenk, Nebr. Bd. Agr. R. f. 1910, 367.

Webster, J. Ec. Ent. V, 290, 1912.

Webster, U. S. C. 158, 1, 1912.

Weldon, Colo. B. 152, 3, 1909.

Weldon, Colo. Bd. Hort. R. f. 1909, 39.

Weldon, Better Fr., Apr. 1910, 21.

Weldon, Colo. B. 169, 10, 1910.

Weldon, J. Ec. Ent. III, 430, 1910.

Weldon, Colo. Bd. Hort. R. f. 1909, 39, 1910.

Weldon, Colo. Fr. Grow., Apr.-May 1910, 6.

Whitmarsh, Ohio B. 253, 142, 1912.

Bryobia sp.

Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 230, 1907.

Gillette, Better Fr., Feb. 1910, 16.

Bucculatrix canadensisella

Britton, J. Ec. Ent. III, 435, 1910.

Britton, Conn. R. 10, 701, 1911.

Britton, J. Ec. Ent. V, 465, 1912.

Britton, Conn. R. 13, 255, 1914.

Caesar, Ont. Ent. Soc. R. 42, 34, 1912.

Douglass, Ind. Ent. R. 2, 68, 1910.

Felt, N. Y. St. Mus. Mem. 8, 315, 1905.

Felt, N. Y. R. 23, 47, 1908.

Felt, N. Y. R. 26, 64, 1911.

Fernald, J. Ec. Ent. V, 246, 1912.

Fernald, Mass. R. 24, I, 82, 1912.

Fernald, Mass. R. 25, II, 85, 1913.

Gibson, Ont. Ent. Soc. R. 41, 15, 1911.

Johannsen, Me. B. 177, 24, 1910.

Johannsen, Me. B. 187, 2, 1911.

Johannsen & Patch, Me. B. 195, 239, 1911.

Thompson, J. Ec. Ent. III, 436, 1910.

Walker, Ont. Ent. Soc. R. 42, 61, 1912.

- Washburn, Minn. Ent. R. 13, 108, 1910.
 Weiss, N. J. R., 1912, 430.
- Bucculatrix pomifoliella**
 Baldwin, Ind. Ent. R. 5, 85, 1912.
 Douglass, Ind. Ent. R. 3, 119, 1910.
 Garman, Ky. B. 133, 16, 1908.
 Gossard, Ohio B. 164, 18, 1905.
 Gossard, Ohio B. 233, 103, 1911.
 Hitchings, Me. Comm. Agr. R., 1907, 302, 1908.
 Hitchings, Me. Dept. Agr. Quart. B., vol. VII, 1, 35, 1908.
 Hitchings, Me. Ent. R. 3, 98, 1908.
 Johannsen & Patch, Me. Com. Agr. R. f., 1910, 347.
 Johannsen & Patch, Me. B. 195, 239, 1911.
 Lochhead, Syn. Ec. Ent. 53, 1914.
 O'Kane, Inj. Ins. 278, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 56, 1914.
 Symons, Md. B. 101, 140, 1905.
- Bucculatrix thurberiella**
 Morrill, Ariz. Comm. Agr. & Hort. R. 6, 44, 1914.
- Buck moth**, *see* **Hemileuca maia**
Bud moth, *see* **Tmetocera ocellana**
Budworm, *see* **Chloridea virescens**
Bud-worm
 Gee, South. Cult., May 1, 1912, 6.
- Buffalo gnats**, *see* **Simulium**
Buffalo moth, *see* **Anthrenus scrophulariae**
Buffalo tree-hopper, *see* **Ceresa bubalus**
Bug death
 Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 10, 1907.
 Rogers, Pa. Dept. Agr. B. 190, 44, 1910.
- Buhach**
 ——— Pac. Rur. Press LXXXI, 371, 1911.
 ——— Pac. Rur. Press LXXXIII, 243, 1912.
- Bulinus dormani**
 Berger, Fla. B. 88, 69, 1907.
 Berger, Fla. R., 1909, xxxvi.
- Buprestis apicans**
 Burke, U. S. Y. B., 1909, 410.
 Hopkins, U. S. B. 58, 62, 1909.
- Buprestis aurulenta**
 Burke, U. S. Y. B., 1909, 412.
- Buprestis fasciata**
 Felt, N. Y. St. Mus. Mem. 8, 458, 1906.
- Buprestis maculiventris**
 Felt, N. Y. St. Mus. Mem. 8, 674, 1906.
- Buprestis striata**
 Felt, N. Y. St. Mus. Mem. 8, 655, 1906.
- Byturus unicolor**
 Dean & Pcairs, Kans. Agr. Educ. VI, 2, 118, 1913.
 Felt, N. Y. R. 27, 102, 1912.
 Goodwin, Ohio B. 202, 173, 1909.
 Gossard, Ohio B. 198, 74, 1908.
 Gossard, Ohio C. 89, 3, 1909.
 Lochhead, Syn. Ec. Ent. 71, 1914.
 O'Kane, Inj. Ins. 342, 1914.
 Pettit, Mich. B. 244, 213, 1907.
 Sanderson, Ins. Pests, 474, 1912.
 Slingerland, Rur. N. Y., 1908, 120.
 Slingerland & Crosby, Man. Fr. Ins. 223, 1914.
 Surface, Pa. D. A. Zool. III, 1, 9, 1913.
 ——— U. S. Y. B., 1908, 574.
- Cabbage aphid**, *see* **Aphis brassicae**
Cabbage curculio, *see* **Ceutorhynchus rapae**
Cabbage diseases distributed by insects
 Harter, U. S. F. B. 488, 7, 1912.
- Cabbage insects**
 Chittenden, Va. Truck Exp. Sta. B. 2, 19, 1909.
 Clay, Tex. Agr. & Statis. R. 264, 1905.
 Judson, N. Y. C. B. 292, 257, 1911.
 Sherman, N. C. Dept. Agr. B. 32, 7, '11.
 Smith, N. J. B. 200, 1907.
 Surface, Pa. D. A. Zool. III, 6, 172, 1905.
 Wells, Prai. Farm., LXXVIII, 504, '06.
- Cabbage looper**, *see* **Autographa brassicae**
Cabbage maggot, *see* **Pegomyia brassicae**
Cabbage webworm, *see* **Hellula undalis**
Cabinet beetle, *see* **Anthrenus verbasci**
Cabot's Sulpho-Naphthol
 ——— U. S. D. A. Ins. & Fung. Bd. Ins. 5, p. 70, 1914.
- Cactus-joint bug**, *see* **Chelinidea tabulata**
Cactus scale, *see* **Diaspis echinocacti-cacti**.
- Cacoecia**, *see* **Archips**
Cacus acanthi
 Parrott & Fulton, N. Y. St. B. 388, 427, 1914.
- Cadelle**, *see* **Tenebroides mauritanicus**
Caenocorse ratzeburgi
 ——— U. S. Y. B., 1908, 579.

Calandra granaria

- Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 52.
 Bentley, Tenn. Bd. Ent. R. f. 1913, 26.
 Bethune, Ont. Soc. R. 39, 134, 1909.
 Conradi, Farm & Ranch, Mar. 17, '06, 4.
 Conradi, Tex. Stockm. Farm., Mar. 14, 1906, 2.
 Conradi, U. S. B. 60, 69, 1906.
 Conradi, Tex. Stockm. Farm., Sept. 25, 1907, 2.
 Cooley, Mont. B. 98, 127, 1914.
 Dean, South. Plant., May 1907, 449.
 Dean, Kans. Agr. Educ. I, 4, 58, 1909.
 Dean, Kans. B. 189, 199, 1914.
 Dietz, Ind. Ent. R. 6, 88, 1914.
 Gibson, Can. Ent., 1905, 233.
 Girault, Ill. B. 156, 80, 1912.
 Girault, Ill. Ent. R. 27, 69, 1912.
 Gossard, Ohio B. 233, 84, 1911.
 Herrick, Household Ins. 258, 1914.
 Hinds, Prog. Farm., Jan. 4, 1913, 6.
 Lewis, Prog. Farm., Sept. 17, 1908, 5.
 McQuarrie, Fla. Fr. Prod. News, Jan. 14, 1910, 1.
 Morgan, Tenn. Bd. Ent. R. f. 1910, 48.
 Newell, Tex. P. B., 1910.
 O'Kane, Inj. Ins. 364, 1914.
 Price, Va. C. 7, 72, 1909.
 Sanderson, Ins. Pests, 186, 1912.
 Smith, N. C. B. 197, 39, 1908.
 Smith, Prog. Farm., Oct. 29, 1908, 4.
 Smith, N. C. B. 203, 9, 1909.
 Smith, Prog. Farm., May 20, 1909, 4.
 Smith, Prog. Farm., Sept. 23, 1911, 791.
 Stedman, Mo. Bd. Agr. R. 38, 332, 1906.
 Surface, Pa. D. A. Zoöl. III, 7, 1913.
 Swenk, Nebr. Bd. Agr. R. f. 1910, 366.
 Swenk, Nebr. Ent. B. 1, 104, 1913.
 Symons, Md. B. 101, 169, 1905.
 ——— Farm & Ranch, Sept. 23, '05, 6.

Calandra oryza

- Conradi, U. S. B. 60, 69, 1906.
 Conradi, Tex. Stockm. Farm., Sept. 25, 1907, 2.
 Dean, Kans. Agr. Educ. I, 4, 58, 1909.
 Dean, Kans. B. 189, 200, 1913.
 Dietz, Ind. Ent. R. 6, 89, 1914.
 Gee, S. C. B. 170, 11, 1912.
 Gibson, Can. Ent., 1905, 234.
 Girault, Ill. Ent. R. 27, 70, 1912.
 Girault, Ill. B. 156, 81, 1912.

- Gossard, Ohio B. 233, 84, 1911.
 Herrick, Household Ins. 261, 1914.
 Hinds, Ala. Poly. B. 146, 101, 1909.
 Hinds, Ala. Poly. B. 176, 52, 54, 1914.
 Hinds, J. Ec. Ent. VII, 203, 1914.
 Hinds & Turner, J. Ec. Ent. III, 47, '10.
 Hinds & Turner, J. Ec. Ent. IV, 230, '11.
 Howard, U. S. R. Ent., 1908, 35.
 Morrill, S. W. Stockm., Mar. 6, 1914, 9.
 Newell, Tex. P. B., 1910.
 O'Kane, Inj. Ins. 364, 1914.
 Parker, U. S. D. A. B. 15, 2, 1913.
 Pierce, U. S. B. 100, 80, 1912.
 Sanderson, Ins. Pests, 186, 1912.
 Smith, Ga. Bd. Ent. B. 20, 171, 1906.
 Smith, N. C. B. 197, 39, 1908.
 Smith, N. C. B. 203, 7, 1909.
 Smith, Prog. Farm., Sept. 23, 1911, 791.
 Smith & Lewis, U. S. B. 60, 82, 1906.
 Surface, Pa. D. A. Zoöl. III, 1, 8, 1913.
 Tucker, J. Ec. Ent. II, 374, 1909.
 Tucker, La. R. f., 1912, 18.
 ——— U. S. Y. B., 1907, 551.

Calaphis betulaecolens

- Felt, N. Y. St. Mus. Mem. 8, 601, 1906.
 Felt, J. Ec. Ent. II, 307, 1909.
 Gillette, J. Ec. Ent. III, 369, 1910.
 Patch, Me. B. 148, 272, 1907.

Calaphis castaneae

- Gillette, J. Ec. Ent. III, 368, 1910.

***Calathus* sp. on codling moth**

- Quaintance, U. S. Y. B., 1907, 443.

Calcium arsenite

- Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 12, 1907.

Calcium carbide

- Weiss, N. J. R., 1912, 493.

Calcium sulphide against ticks

- Powell, Med. Herald, XXX, 557, 1911.

Calcothion

- Fernald, Mass. B. 116, 17, 1907.

Calendar, entomological

- Washburn, Minn. R. 11, 41, 1906.

California Christmas-berry tings

- Pemberton, J. Ec. Ent. IV, 339, 1911.

California grape root-worm, see Bromius obscurus***California katydid, see Scudderella furcifera******California lachnosterna, see Lachnosterna errans******California laurel borer, see Rosalia funebris***

- California oak moth, *see* Phryganidia californica
- California parsley caterpillar, *see* Papilio zolicaon
- California peach-tree borer, *see* Sannioidea opalescens
- California pear sawfly, *see* Gymnonychus californicus
- California phryganidia, *see* Phryganidia californica
- California pine-leaf scale, *see* Aspidiotus californicus
- California prionus, *see* Prionus californicus
- California tent-caterpillar, *see* Malacosoma californica
- California tussock-moth, *see* Hemerocampa vetusta
- California wash, *formula*
Pickett, Ill. Hort. Soc. f., 1907, 386.
- Caligonius terminalis
Quayle, Cal. B. 234, 499, 1912.
- Caliroa amygdalina
Cushman, U. S. B. 97, 1, 1911.
O'Kane, Inj. Ins. 289, 1914.
Slingerland & Crosby, Man. Fr. Ins. 288, 1914.
- Caliroa cerasi
Adams, Ark. B. 92, 10, 1907.
Baldwin, Ind. Ent. R. 5, 90, 1912.
Baldwin, Farm. Guide, Feb. 7, 1914, 16.
Ball & Titus, Deseret Farm., May 6, 1911, 1.
Ball & Titus, Utah Hort. Comm. Bien. R. f. 1909-1910, 47.
Barre & Conradi, S. C. B. 141, 29, 43, 1909.
Bethune, Ont. Agr. Coll. B. 158, 19, '07.
Bethune, Ont. Ent. Soc. R. 39, 133, '09.
Bremner, Cal. Hort. Comm. Destr. Ins., 1910, 15.
Chandler, Mo. Hort. Soc., 1909, 356.
Cook, Cal. Hort. B. III, 1, 40, 1914.
Cooper, Cal. Hort. Comm. Ins. & Insect., 19, 1905.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 65, 1913.
Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 118, 1905.
Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 226, 1907.
Erwin, Or. Judd. Farm., July 22, '05, 80.
- Essig, Cal. Hort. B. II, 1-2, 281, 1913.
Felt, N. Y. Fr. Grow. Assoc., 1910, 35.
Felt, N. Y. R. 26, 40, 1911.
Fulton, Wright & Gregg, Pa. B. 110, 33, 1911.
Funk, Pa. Dept. Agr. B. 152, 247, 1907.
Gardner, Me. Comm. Agr. R. 1913, 58.
Gibson, Ont. Ent. Soc. R. 39, 120, 1909.
Gibson, Ont. Ent. Soc. R. 40, 12, 1910.
Gibson, Ont. Ent. Soc. R. 41, 13, 1911.
Gillette, Colo. B. 114, 16, 1906.
Gillette, Colo. Fr. Grow., June, 1908, 6.
Gillette, The Ranch, July 1, 1908, 8.
Gillette, Colo. Fr. Grow., July 1909, 9.
Gillette, Better Fr., Feb. 1910, 19.
Gillette Colo. Fr. Grow., July 1910, 15.
Gossard, Ohio B. 198, 58, 1908.
Gossard, Ohio B. 233, 116, 1911.
Gossard, O. Farm., Aug., 29, 1914, 177.
Haseman, Mo. Hort. Soc., 1911, 254.
Hitchings, Me. Ent. R. 5, 7, 1910.
Jarvis, Conn. Storrs, B. 56, 262, 1909.
Moore, Wis. B. 190, 28, 1910.
Morrill, S. W. Stockm., Oct. 23, 1914, 8.
Morris, Ont. Ent. Soc. R. 41, 17, 1911.
Moulton, Pac. Rur. Press, LXXXI, 399, 1911.
O'Kane, Inj. Ins. 288, 1914.
Osborn, U. S. B. 52, 49, 1905.
Parks, Farm. Guide, July 4, 1914, 10.
Quayle, J. Ec. Ent. IV, 525, 1911.
Sanderson, Ins. Pests, 642, 1912.
Slingerland & Crosby, N. Y. C. B. 252, 342, 1908.
Slingerland & Crosby, Man. Fr. Ins. 214, 1914.
Slingerland, Herrick & Crosby, N. Y. C. B. 283, 474, 1910.
Smith, N. J. B. 181, 43, 1905.
Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 9.
Stahl, The Ranch, Aug. 1, 1913, 5.
Swenck, Nebr. Hort. Soc. B. 19, 18, '08.
Symons, Md. B. 101, 149, 1905.
Treherne, Ont. Ent. Soc. R. 41, 20, '11.
Treherne, Ont. Ent. Soc. R. 42, 23, '12.
Treherne, Pr. Ent. Soc. B. C., 4, 25, '14.
Webster, Farm. Guide, July 3, 1909, 7.
Webster, J. Ec. Ent. II, 211, 1909.
Webster, Ann. Ent. Soc. Am. IV, 181, 1911.
Webster, Iowa B. 130, 167, 1912.

- Webster, Jr. N. Y. Ent. Soc. XX, 125, 1912.
- Weed, Nat'l Stockm. & Farm., May 24, 1913, 10.
- Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 118.
- Wilson, Pr. Ent. Soc. B. C., 2, 7, 1912.
- Caliroa limacina*, *see* *C. cerasi*
- Calitys scabra*
Felt, N. Y. St. Mus. Mem. 8, 496, 1906.
- Callidium aereum*
Felt, N. Y. St. Mus. Mem. 8, 450, 1906.
Felt, N. Y. St. Mus. Mem. 8, 660, 1906.
- Callidium antennatum*
Johannsen, Me. B. 187, 7, 1911.
Webb, U. S. Y. B., 1910, 350.
- Calliephialtes comstockii*
Cushman, J. Agr. Res. I, 214, 1913.
- Calliephialtes messor*
Cooper, Cal. Hort. Comm. Bien. R. 2, 14, 1907.
Cushman, J. Agr. Res. I, 211, 1913.
Essig, Cal. Hort. B. II, 1-2, 265, 1913.
Quaintance, U. S. Y. B., 1907, 443.
Whitaker, Cal. Hort. Comm. C. Nov. 1905, 13.
——— Cal. Hort. Comm. Bien. R. 2, 231, 1907.
- Calliephialtes pusio*
Cushman, J. Agr. Res. I, 214, 1913.
- Calliephialtes* sp.
Smith, Cal. Hort. B. III, 5, 195, 1914.
- Calliphora* and disease
Dutton, Jr. Amer. Med. Assoc., liii, 1561, 1909.
- Calliphora erythrocephala*
Herrick, Household Ins. 49, 1914.
Hine, Nor'-West Farm., May 20, '10, 643.
Howard, U. S. C. 71, 2, 1906.
Howard, U. S. F. B. 459, 6, 1911.
Whitmarsh, Ohio B. 253, 111, 1912.
- Calliphora viridescens*
Felt, N. Y. R. 26, 66, 1911.
- Calliphora vomitoria*
Doane, Ins. Disease, 48, 1910.
Washburn, Minn. P. B. 22, 22, 1905.
- Callipterus betulaecolens*, *see* *Calaphis*
- Callipterus caryella*, *see* *Monellia*
- Callipterus juglandicola*, *see* *Chromaphis*
- Callipterus*, *see* *Myzocallis*
- Calloides nobilis*
Felt, N. Y. St. Mus. Mem. 8, 443, 1906.
- Callopietria floridensis*
Davis, J. Ec. Ent. III, 183, 1910.
Davis, Ill. Ent. R. 27, 88, 1912.
——— U. S. Y. B., 1908, 578.
- Callosamia promethea*
Britton, Conn., R. 13, 254, 1914.
Douglass, Ind. Ent. R. 2, 47, 1910.
Felt, N. Y. St. Mus. Mem. 8, 557, 1906.
Gossard, Ohio B. 164, 22, 1905.
Gossard, Ohio B. 233, 130, 1911.
Patch, Me. B. 108, 165, 1905.
- Calocampa nupera*
Franklin, Mass. B. 115, 9, 1907.
Franklin, Mass. B. 126, 5, 1908.
O'Kane, Inj. Ins. 274, 1914.
Slingerland & Crosby, Man. Fr. Ins. 470, 1914.
- Calocoris rapidus*
Forbes, Ill. Ent. R. 23, 199, 1905.
Morrill, U. S. B. 86, 92, 1910.
Sanderson, U. S. F. B. 223, 20, 1905.
Sanderson, U. S. B. 57, 44, 1906.
Sanderson, Ins. Pests, 251, 1912.
Smith & Lewis, U. S. B. 60, 81, 1906.
Webster & Stoner, Jr. N. Y. Ent. Soc. XXII, 229, 1914.
——— U. S. Y. B., 1905, 631.
——— U. S. Y. B., 1906, 509.
- Calopus angustus*
Burke, Pr. Ent. Soc. Wash. VIII, 64, 1906.
- Calosoma auropunctatum*
Burgess & Collins, U. S. Y. B., 1911, 465.
- Calosoma calidum*
Burgess & Collins, U. S. Y. B., '11, 458.
Gibson, Can. Exp. Farms Ent. B. 3, 12, 1912.
Hitchings, J. Ec. Ent. III, 148, 1910.
Patch, Me. B. 148, 262, 1907.
Runner, U. S. D. A. B. 78, 13, 1914.
Symons, Md. B. 101, 198, 1905.
- Calosoma cancellatum*
Graf, U. S. B. 123, 47, 1914.
- Calosoma chinense*
Burgess & Collins, U. S. Y. B., '11, 465.
- Calosoma externum*
Burgess & Collins, U. S. Y. B., '11, 459.
- Calosoma frigidum*
Burgess, J. Ec. Ent. III, 217, 1910.
Burgess & Collins, U. S. Y. B., '11, 458.
Hitchings, J. Ec. Ent. III, 148, 1910.
Sanderson, J. Ec. Ent. III, 210, 1910.

Calosoma inquisitor

- Burgess & Collins, U. S. Y. B., '11, 463.
Howard, U. S. R. Ent., 1906, 10.
Howard & Fiske, U. S. B. 91, 254, 1911.
Howard & Fiske, U. S. B. 91, 59, *et seq.*, 1911.

Calosoma lugubre

- Burgess & Collins, U. S. Y. B., '11, 459.
Hunter, Pr. Ent. Soc. Wash. XIV, 62, 1912.

Calosoma maximowiczii

- Burgess & Collins, U. S. Y. B., '11, 465.

Calosoma reticulatum

- Burgess & Collins, U. S. Y. B., '11, 465.

Calosoma sayi

- Chittenden, U. S. B. 66, 64, 1909.

Calosoma scrutator

- Britton, U. S. B. 67, 24, 1907.
Burgess & Collins, U. S. Y. B., '11, 458.
Gill, U. S. B. 116, 102, 1913.
Symons, Md. B. 101, 197, 1905.

Calosoma semilaeve

- Burgess & Collins, U. S. Y. B., '11, 459.
Graf, U. S. B. 123, 47, 1914.

Calosoma sp.

- Patch, Me. B. 161, 343, 1903.
Smith, N. J. R., 1906, 545.

Calosoma sycophanta

- Burgess, Ann. Ent. Soc. Am. IV, 173, 1911.
Burgess, U. S. B. 101, 7, 1911.
Burgess, U. S. F. B. 564, 6, 11, 1914.
Burgess & Collins, U. S. Y. B., '11, 463.
Howard, U. S. Y. B., 1905, 132.
Howard, U. S. R. Ent., 1906, 10.
Howard, U. S. R. Ent., 1907, 16.
Howard, U. S. R. Ent., 1908, 15.
Howard, Mass. G. and B-T R. 4, 72, 1909.
Howard, U. S. R. Ent., 1909, 11.
Howard, Mass. For. R. 10, 84, 1913.
Howard, Ann. Ent. Soc. Am. VII, 88, 1914.
Howard, U. S. R. Ent., 1914, 3.
Howard & Fiske, U. S. B. 91, 59 *et seq.*, 1911.
Howard & Fiske, U. S. B. 91, 252, 1911.
Kirkland, Mass. G. & B-T R. 4, 59, 1909.
Rane, Mass. For. R. 10, 89, 1913.
Tothill, Ent. Soc. Ont. R. 43, 57, 1913.

Calosoma willcoxi

- Britton, Conn. R. 10, 663, 1911.
Burgess & Collins, U. S. Y. B., '11, 459.

Calpodus ethlius

- Bentley, Tenn., Bd. Ent. R. f., '11, 5.
Bentley, Tenn., Bd. Ent. R. 7, 5, 1912.
Chittenden, U. S. B. 54, 54, 1905.
Chittenden, U. S. C. 145, 1, 1912.
——— U. S. Y. B., 1905, 635.

Calycopis cecrops

- Quaintance & Brues, U. S. B. 50, 105, 1905.

Cambala annulata

- Sanderson, Ins. Pests, 301, 1912.

Camden Mixture

- Smith, N. J. R., 1906, 598.

Camnula pellucida

- Ball, Utah Farm., July 12, 1913, 811.
Bruner, U. S. B. 54, 64, 1905.
Essig, Cal. Hort. B. II, 1-2, 15, 1913.
Fletcher, Can. Exp. Farms, B. 52, 21, 1905.
Forbes, Ill. Ent. R. 23, 139, 1905.
Gibson, Ont. Ent. Soc. R. 44, 16, 1914.
Pettit, Mich. B. 233, 206, 1906.
Pettit, Mich. B. 258, 302, 1910.
Sanderson, Ins. Pests, 99, 1912.
Vosler, Cal. Hort. B. III, 6, 241, 1914.
Westgate, McKee & Evans, U. S. F. B. 495, 30, 1912.
Wilson, Oreg. Bien. Crop Pest R. f., 1913-1914, 134.

Camphor-phenol as *culicide*

- Francis, Pub. Health R. XXII, 341, '07.

Campoletis tibiator

- Houghton, Del. R. 16-17-18, 89, 1907.

Camponotus ferrugineus

- Forbes, Ill. B. 131, 33, 1908.

Camponotus herculeanus

- Felt, N. Y. St. Mus. Mem. 8, 90, 1905.
Felt, N. Y. R. 21, 103, 1906.
Felt, N. Y. St. Mus. B. 129, 31, 1909.
Felt, N. Y. R. 26, 57, 1911.
Felt, N. Y. St. Mus. B. 136, 36, 1912.
Newell, J. Ec. Ent. I, 34, 1908.
Whitmarsh, Ohio B. 253, 121, 1912.

Camponotus pennsylvanicus

- Hammar, U. S. B. 80, 110, 1910.
Herrick, Household Ins. 177, 1914.

Campoplex pomorum

- Quaintance, U. S. Y. B., 1907, 443.

- Camptobrochis brevis**
Davidson, U. S. D. A. B. 100, 36, 1914.
- Camptobrochis grandis**
Felt, N. Y. St. Mus. Mem. 8, 614, 1906.
Woods, Me. B. 137, 291, 1906.
- Campylacantha olivacea**
Forbes, Ill. Ent. R. 23, 213, 1905.
- Campylenchia curvata**
Swenk, Nebr. Ent. B. 1, 94, 1913.
- Campylomma verbasci**
Parrott, J. Ec. Ent. VI, 64, 1913.
Parrott & Hodgkiss, N. Y. St. B. 368, 382, 1913.
- Canadian leptura, see Leptura canadensis**
- Canarsia hammondi**
Crandall, Ill. Hort. Soc. f., 1911, 342, '12.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 129, 1913.
Garman, Ky. B. 133, 18, 1908.
O'Kane, Inj. Ins. 277, 1914.
Quayle, J. Ec. Ent. IV, 526, 1911.
Slingerland & Crosby, Man. Fr. Ins. 67, 1914.
Swenk, Nebr. Hort., 1909, 83.
- Canestrinia sp.**
Phillips, U. S. B. 85, 19, 27, 1909.
- Cantharis sphaericollis**
—— U. S. Y. B., 1905, 635.
- Canidiella curculionis**
Webster, U. S. B. 112, 38, 1912.
- Canker worms**
Barre & Conradi, S. C. B. 141, 23, 1909.
Britton, Conn. R. 9, 368, 1910.
Burgess, Ohio Nurs. Orch. Insp. R. 4, 10, 1906.
Byrne, Green's Fr. Grow., Mar. 1913, 30.
Felt, N. Y. R. 24, 45, 1909.
Felt, N. Y. R. 25, 89, 1910.
Funk, Pa. Dept. Agr. B. 152, 223, 1907.
Goodwin, Ohio Hort. Soc., 1910, 105.
Gossard, Ohio Hort. Soc., 1912, 64.
Hall, Kans. Hort. Soc., 1905, 293.
Jarvis, Conn. Storrs B. 56, 239, 1909.
Kirkland, Me. Dept. Agr. Quart. B., vol. IV, 1, 8, 1905.
Munson, Me. Dept. Agr. Quart. B., vol. IV, 1, 16, 1905.
Parrott, Pr. West. N. Y. Hort. Soc., 58 Meet., 130, 1913.
Slingerland & Crosby, N. Y. C. B. 252, 337, 1908.
- Slingerland, Herrick & Crosby, N. Y. C. B. 283, 467, 1910.
Surface, Pa. D. A. Zoöl. B. II, 10 & 11, 364, 1905.
Surface, Pa. D. A. Zoöl. B. III, 1, 31, '05.
Surface, Pa. D. A. Zoöl. B. III, 5, 139, 1905.
Surface, Nat'l Stockm. & Farm., Jan. 11, 1906, 30.
Surface, Pa. D. A. Zoöl. V, 12, 368, '08.
Surface, Pa. R. 16, 122, 1910.
Surface, Pa. D. A. Zoöl. I, 1, 17, 1911.
Van Buren & Huested, N. Y. Dept. Agr. B. 24, 479, 1911.
Volk, Better Fr., Jan. 1913, 32.
Wilson, Oreg. Bien. Crop Pest R. f., 1911-1912, 155.
- Canker worms, see also Anisopteryx and Paleacrita**
- Cantharis cyanipennis**
Gibson, Ent. Soc. Ont. R. 42, 86, 1912.
- Cantharis nuttali**
Chittenden, Ins. Inj. Veg. 118, 1907.
Cooley, Mont. R. 12, 263, 1906.
Cooley, Mont. B. 98, 127, 1914.
Criddle, J. Ec. Ent. IV, 239, 1911.
Gibson, Ent. Soc. Ont. R. 42, 84, 1912.
Sanderson, Ins. Pests, 317, 1912.
—— U. S. Y. B., 1908, 569.
- Canthophorus cinctus**
Patch, Me. B. 162, 364, 1908.
- Canyon cricket, see Peranabrus scabricollis**
- Caprification**
Rixford, Cal. Hort. B. I, 9, 623, 1912.
Starnes & Monroe, Ga. B. 77, 1907.
- Capsids, biting**
Tucker, Can. Ent., 1911, 30.
- Caradrina exigua, see Laphygma**
- Carboleine**
Jarvis, Conn. Storrs B. 54, 177, 1908.
Walden, Conn. R. 10, 690, 1911.
- Carbolic acid**
Jarvis, Conn. Storrs, B. 54, 186, 1908.
Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 23, 1907.
Smith, N. J. R., 1906, 603.
Smith, N. J. R., 1907, 463.
Smith, Rur. N. Y., 1907, 375.
Smith, N. J. B. 213, 27, 1908.
Smith, N. J. R., 1908, 368.
- Carbolic acid and lime**
Smith, N. J. R. 200, 18, 1907.

Carbolic acid emulsion

- Jarvis, Conn. Storrs, B. 56, 228, 1909.
 Slingerland & Crosby, N. Y. C. B. 252, 347, 1908.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 477, 1910.
 Smith, N. J. R., 1908, 369.
 Stone & Fernald, Mass. B. 123, 10, '08.

Carbolic acid fertilizer

- Smith, N. J. R., 1908, 370.

Carbolineum avenarius

- Gossard, Ohio C. 87, 11, 1908.
 Smith, N. J. R., 1907, 472.

Carbon bisulphide

- Britton, Conn. R. 8, 797, 1909.
 Garman, Ky. B. 147, 20, 1910.
 Gossard, Rur. N. Y., 1909, 805.
 Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 23, 1907.
 Jarvis, Conn. Storrs B. 56, 232, 1909.
 Morris & Parker, Mont. C. 36, 250, '14.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 129, 1909.
 O'Kane, Inj. Ins. 80, 1914.
 Rosenau, Prevent. Med., 195, 1913.
 Smith, N. J. B. 213, 34, 1908.
 Smith, N. J. Ent. C. 25.
 Stone & Fernald, Mass. B. 123, 12, '08.
 Walden, Conn. R. 6, 294, 1907.
 Whitmarsh, Ohio B. 253, 150, 1912.
 ——— Rur. N. Y., 1908, 834.
 ——— Rur. N. Y., 1912, 327.

Carbon disulphide

- Britton, Conn. R. 7, 272, 1908.
 Britton, J. Ec. Ent., 1908, 111.
 Gee, S. C. B. 170, 14, 1912.
 Hinds, J. Ec. Ent. II, 214, 1909.
 Hinds, J. Ec. Ent. II, 161, 1909.
 Hinds, J. Ec. Ent. IV, 532, 1911.
 Smith, N. J. B. 200, 21, 1907.

Carbon tetrachloride

- Britton, Conn., R. 7, 275, 1908.
 Britton, J. Ec. Ent. I, 111, 1908.
 Britton, Conn., R. 8, 798, 1909.
 Chittenden & Popenoe, U. S. B. 96, 53, 1911.
 O'Kane, Inj. Ins. 81, 1914.

Carcelia gnava

- Howard & Fiske, U. S. B. 91, 231, 1911.

Carcelia nigropalpus

- Herrick, N. Y. C. B. 311, 286, 1912.

Carcelia pyste

- Herrick, N. Y. C. B. 311, 291, 1912.

Cardiophiles explorator

- Sanderson, U. S. B. 57, 13, 1906.

Carneades, see Euxoa**Carolina locust, see Dissosteira carolina****Carpet beetles, see Anthrenus and Attagenus****Carpet moth, see Trichophaga tapetzella****Carpocapsa pomonella**

- Adams, Ark. B. 92, 1, 1907.
 Alderman, Giddings & Rumsey, W. Va. C. 7, 26, 1913.
 Aldrich, Deseret Farm, Dec. 31, 1910, 8.
 Austin, Cal. Hort. Comm. C. Nov. 1905, 11.
 Baldwin, Ind. Ent. R. 5, 49, 1912.
 Baldwin, Farm. Guide, Apr. 25, '14, 4.
 Baldwin, Ind. Ent. R. 6, 23, 1914.
 Ball, Deseret Farm., Feb. 16, 1905, 1.
 Ball, Deseret Farm., May 11, 1905, 1.
 Ball, Deseret Farm., Aug. 3, 1905, 2.
 Ball, Utah, R. 16, XIV, 1905.
 Ball, Utah, Bd. Hort. Bien. R. f., 1905-1906, 59, 1907.
 Ball, Utah R. 17, xxxii, 1906.
 Ball, Deseret Farm., Jan. 27, 1906, 2.
 Ball, Deseret Farm., May 19, 1906, 2.
 Ball, Deseret Farm., June 2, 1906, 1.
 Ball, Better Fr. Aug. 1906, 5.
 Ball, Northw. Hort., Jan. 1906, 6.
 Ball, U. S. B. 67, 55, 1907.
 Ball, Deseret Farm., Dec. 14, 1907, 6.
 Ball, Better Fr., Apr. 1909, 21.
 Ball, Better Fr., Feb. 1910, 27.
 Ball, Deseret Farm., Apr. 23, 1910, 15.
 Ball, Deseret Farm., May 7, 1910, 14.
 Ball, Colo. Fr. Grow., June 1910, 13.
 Ball, Deseret Farm., June 1, 1912, 789.
 Ball, Utah Farm., May 3, 1913, 647.
 Ball, Utah, Farm., May 24, 1913, 910.
 Ball, Utah Farm., Sept. 20, 1913, 130.
 Ball, Utah Farm., Feb. 21, 1914, 736.
 Ball, Utah Farm., Apr. 18, 1914, 912.
 Ball & Ball, Utah B. 129, 1913.
 Ball & Peterson, Utah B. 95, 65, 1906.
 Ball & Titus, Deseret Farm., May 6, '11, 1.
 Ball, & Titus, Utah Hort. Comm. Bien. R. f., 1909-1910, 46, 1911.
 Barre & Conradi, S. C. B. 141, 23, 1909.
 Beach, Iowa B. 127, 55, 1912.
 Bethune, Can. Hort. XXIX, 294, 1906.

Carpocapsa pomonella (*Cont'd*)

- Bethune, Ont. Agr. Coll. R. 35, 31, 1910.
 Bethune, Ont. Agr. Coll. R. 35, 29, 1910.
 Brenner, Cal. Hort. Comm. Destr. Ins. 15, 1910.
 Brindley, Conn. Farm., May 6, 1905, 1.
 Brittain, Pr. Ent. Soc. B. C., 4, 14, '14.
 Brodie, Ont. Ent. Soc. R. 37, 5, 1907.
 Brown, Northw. Hort., Feb. 1905, 25.
 Buck, Va. R. f., 1908, 54.
 Buck, Va. B. 181, 1909.
 Buckley, Me. Dept. Agr. B., vol. X, 3, 5, 1911.
 Burgess, Ohio Nurs. Orch. Insp. R. 4, 11, 1906.
 Burgess, U. S. B. 52, 53, 101, 1905.
 Burgess, U. S. B. 60, 72, 1906.
 Burgess, Ohio Nurs. Orch. Insp. B. 9, 24, 1907.
 Burgess, U. S. B. 67, 53, 1907.
 Byrne, Green's Fr. Grow., Mar. 1913, 30.
 Caesar, Farm & Dairy, Can., May 27, 1909, 3. Mar. 2, 1911, 5.
 Caesar, Ont. Agr. Coll. B. 187, 3, 1911.
 Caesar, Ont. Ent. Soc. R. 41, 21, 1911.
 Caesar, Ont. Ent. Soc. R. 42, 28, 1912.
 Caesar, Ont. Ent. Soc. R. 43, 75, 1913.
 Caesar, Ont. Ent. Soc. R. 44, 49, 1914.
 Carmody, Farm. Guide, May 17, 1913, 7.
 Carter, Northw. Hort., Apr. 1906, 81.
 Chamberlain, Nat'l Stockm. & Farm., May 16, 1914, 10.
 Chandler, Mo. Hort. Soc., 1909, 350.
 Chandler, Mo. B. 102, 245, 1912.
 Chase, Ga. Bd. Ent. B. 38, 7, 1913.
 Clarke, Oreg. Bd. Hort. 8th Bien. R. 263, 1905.
 Clinton & Britton, Conn. R. f., 1909, 1910, 594, 1911.
 Colvill, Rur. N. Y., 1906, 697.
 Conradi, S. C. R. 21, 35, 1908.
 Conradi & Thomas, S. C. B. 143, 33, '09.
 Cooley, Mont. B. 62, 185, 1905.
 Cooley, Mont. B. 64, 40, 1906.
 Cooley, Mont. B. 71, 151, 1908.
 Cooley, Mont. B. 92, 59, 1912.
 Cooley, Mont. B. 98, 126, 1914.
 Cooley & Swingle, Mont. C. 17, 134, '12.
 Cooper, Cal. Hort. Comm. Ins. & Insect. 1905, 18.
 Cordley, Oreg. Bd. Hort. 9th Bien. R. 64.
 Crowley, Colo. Fr. Grow., June 1908, 3.
 Darrow, Green's Fr. Grow., May 1912, 15.
 Davis, Amer. Cult., Apr. 23, 1910, 11.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 53, 1913.
 Dickens & Eastman, Kans. Farm., Jan. 9, 1908, 36.
 Doten, Nev. B. 66, 35, 1908.
 Doten, Nev. B. 72, 33, 1909.
 Doten, Nev. B. 73½, 43, 1910.
 Doten, Nev. R. f. 1911, 34.
 Douglass, Ind. Ent. R. 1, 132, 1908.
 Douglass, Ind. Ent. R. 3, 121, 1910.
 Earle, Field & Farm, Dec. 16, 1905, 4.
 Eby, O. Farm., May 4, 1907, 490.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 116, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 22, 224, 1907.
 Essig, Ventura Co. (Cal.) Hort. Comm. B. 2, 1911.
 Essig, Cal. Hort. B. II, 1-2, 176, 1913.
 Essig, Cal. Hort. B. II, 9, 659, 1913.
 Faurot, Mo. Fr. Exp. Sta. B. 15, 8, 1906.
 Faurot, Mo. Fr. Exp. Sta. B. 23, 23, '12.
 Faurot, Mo. Bd. Agr. R. 45, 571, 1913.
 Felt, N. Y. R. 21, 91, 1906.
 Felt, N. Y. Fr. Grow. Assoc., 1906, 120, 121.
 Felt, U. S. B. 60, 89, 1906.
 Felt, C. Gentl., 1909, 348.
 Felt, Pr. N. Y. Fr. Grow. Assoc., 7 East. Meet., 113, 1909.
 Felt, Better Fr., May 1910, 66.
 Felt, C. Gentl., 1910, 322, 1174.
 Felt, J. Ec. Ent. III, 172, 474, 1910.
 Felt, N. Y. R. 25, 25, 1910.
 Felt, Mass. Fr. Grow. Assoc., R. 12-16, 141, 1910.
 Felt, Green's Fr. Grow., Jan. 1911, 14.
 Felt, N. Y. R. 26, 12, 1911.
 Felt, N. Y. Dept. Agr. B. 28, 237, 1911.
 Felt, Proc. N. Y. Fr. Grow. Assoc., 9 East. Meet., 57, 1911.
 Felt, Proc. N. Y. Fr. Grow. Assoc., 10 East. Meet., 190, 1912.
 Felt, Am. Agric., Apr. 20, 1912, 571.
 Felt, J. Ec. Ent. V, 153, 1912.
 Felt, N. Y. R. 27, 13, 1912.
 Felt, N. Y. Fr. Grow. Assoc., 1912, 57, 190.

***Carpocapsa pomonella* (Cont'd)**

- Felt, Pr. West. N. Y. Hort. Soc., 57 Meet., 74, 1912.
- Felt, Rur. N. Y., 1912, 355.
- Felt, J. Ec. Ent. VI, 173, 1913.
- Felt, N. Y. R. 28, 13, 1913.
- Felt, Amer. Cult., Apr. 4, 1914, 3.
- Felt, N. Y. Fr. Grow. Assoc., 1914, 24.
- Fernald, Vt. Hort. Soc. R. 8, 39, 1911.
- Fletcher, Ont. Ent. Soc. R. 37, 83, 1907.
- Foster, U. S. B. 97, 13, 1911.
- Fulton, Wright & Gregg, Pa. B. 110, 14, 1911.
- Funk, Pa. Dept. Agr. B. 152, 225, 1907.
- Gahan & Weldon, Md. Hort. Soc., 1906, 122, 1907.
- Gahan & Weldon, U. S. B. 67, 38, 1907.
- Garcia, N. Mex. B. 65, 4, 1907.
- Garcia, N. Mex. B. 68, 42, 1908.
- Garcia, N. Mex. B. 75, 37, 1910.
- Gardner, Me. Comm. Agr. R. f. '11, 49.
- Gardner, Mich. Hort. Soc., '11, 86, '12.
- Garman, Ky. B. 133, 21, 1908.
- Garman, Ky. Bur. Agr. Bien. R. 17, 202, 1908.
- Gibson, Ont. Ent. Soc. R. 40, 12, 1910.
- Gillette, U. S. B. 52, 58, 1905.
- Gillette, Colo. B. 114, 6, 1906.
- Gillette, Colo. R. 19, 144, 1906.
- Gillette, Colo. Fr. Grow., Jan. '07, 9.
- Gillette, Colo. Fr. Grow., May 1907, 15.
- Gillette, Colo. P. B. 44, 1907.
- Gillette, Colo. Fr. Grow., May '08, 8.
- Gillette, Deseret Farm., June 20, '08, 14.
- Gillette, Farm. Guide, May 9, '08, 11.
- Gillette, Better Fr., July 1909, 29.
- Gillette, Cal. Fr. Grow., Nov. '09, 9.
- Gillette, Colo. R. Bd. Hort. f. '09, 22.
- Gillette, Field & Farm, May 15, '09, 10.
- Gillette, Better Fr., Feb. 1910, 15, 32.
- Gillette, Better Fr., June 1910, 57.
- Gillette, Colo. Fr. Grow., Mar. 1910, 25.
- Gillette, Colo. Fr. Grow., June, 1910, 3.
- Gillette, Colo. Fr. Grow., July, 1910, 13.
- Gillette, J. Ec. Ent. III, 29, 1910.
- Gillette, Farm. Guide, May 7, '10, 5.
- Gillette, Conn. Farm., May 20, '11, 6.
- Gillette, Col. Rur. World, June 7, 1911, 178.
- Gillette, Green's Fr. Grow., Apr. '14, 23.
- Gossard, Ohio B. 164, 16, 1905.
- Gossard, Ohio B. 198, 47, 1908.
- Gossard, Green's Fr. Grow., Feb. '09, 3.
- Gossard, Ohio C. 95, 1909.
- Gossard, Ohio B. 233, 91, 1911.
- Graham, Prai. Farm., Apr. 15, 1912, 22.
- Green & Houser, Ohio B. 160, 197, '05.
- Hall, Kans. Hort. Soc., 1905, 295.
- Hallock, Cal. Fr. Grow., Apr. 14, '06, 3.
- Hammar, U. S. B. 80, 71, 1910.
- Hammar, U. S. B. 115, 1, 1912.
- Harris, Better Fr., Nov. 1907, 30.
- Haseaman, Mo. Hort. Soc., 1911, 245.
- Haswell, Colo. Bd. Hort. R. f., '06, 92, '07.
- Haswell, Col. Rur. World, May 29, 1907, 171.
- Haswell, Or. Judd Farm., Apr. 27, 1907, 578.
- Haswell, Field & Farm, Apr. 27, 1912, 4.
- Headlee, Kans. Agr. Educ. I, 3, 21, '09.
- Headlee, Kans. Farm., Apr. 17, '09, 2.
- Headlee, J. Ec. Ent. VI, 389, 1913.
- Headlee, N. J. Hort. Soc., 1913, 50.
- Henderson, Idaho R. f., 1905, 14.
- Henderson, Idaho B. 55, 6, 1907.
- Herrick, Rur. N. Y., 1910, 22, 818.
- Herrick, Pr. N. Y. Fr. Grow. Assoc., 11 Meet., 43, 1912.
- Hewitt & Hayhurst, Ark. B. 109, 430, 1911.
- Hitchings, Me. Comm. Agr. R. 1907, 304, 1908.
- Hitchings, Me. Dept. Agr. Quart. B., vol. VII, 1, 36, 1908.
- Hitchings, Me. Ent. R. 3, 100, 1908.
- Hitchings, Me. Ent. R. 5, 8, 1910.
- Hodges, Pac. Rur. Press, LXXXVII, 497, 1914.
- Houser, Ohio Hort. Soc., 1904, 45.
- Howard, U. S. R. Ent., 1906, 17.
- Howard, U. S. R. Ent., 1907, 21.
- Howard, U. S. R. Ent., 1908, 19.
- Howard, U. S. R. Ent., 1909, 25.
- Howard, U. S. R. Ent., 1910, 22.
- Howard, U. S. R. Ent., 1911, 20.
- Howard, U. S. R. Ent., 1912, 25.
- Hurst, Better Fr., July 1906, 6.
- Hurst, Better Fr., Apr. 1909, 25.
- Jarvis, Conn. Storrs B. 56, 239, 1909.
- Jarvis, Conn. Storrs B. 66, 255, 1911.
- Jenne, Wash. B. 69, 5, 1905.
- Jenne, U. S. B. 80, 1, 1909.
- Johannsen & Patch, Me. Comm. Agr. R. f., 1910, 367.

Carpocapsa pomonella (Cont'd)

- Johnson, Colo. Bd. Hort. R. f., 1906, 107, 1907.
- Jones, Cal. Cult. XLII, 264, 1914.
- Jones & Davidson, U. S. B. 115, 113, '13.
- Kirkland, Me. Dept. Agr. Quart. B. vol IV, 1, 9, 1905.
- Kohler, Iowa Agric., Mar. 1906, 251.
- Lamson, Conn. Storrs B. 71, 69, 1912.
- Langlois, Iowa Agric., May 1908, 367.
- Lewis, Ga. Bd. Ent. B. 30, 24, 1909.
- Lloyd, Ill. B. 114, 377, 1907.
- Lochhead, Can. Ent., 1905, 197.
- Lochhead, Farm. World, Can., '05, 434.
- Lochhead, Ont. Agr. Coll. B. 144, 32, 1905.
- Lochhead, Ont. Ent. Soc. R. 36, 135, '06.
- Lochhead, Ont. Ent. Soc. R. 40, 67, '10.
- Lochhead, Syn. Ec. Ent. 54, 1914.
- Loveland, R. I. R., 1911, Ent. Dept. 12, 1911.
- Marlatt, Better Fr., Apr. 1907, 3.
- Marlatt & Orton, U. S. F. B. 247, 7, '06.
- McCue, Nat'l Fr. Grow., Mar. 1905, 31.
- Melander, Wash. B. 68, 5, 1905.
- Melander, Better Fr., Apr. 1907, 7.
- Melander, Better Fr., May 1908, 26.
- Melander, Ent. News, 1908, 11.
- Melander, Wash. Pop. B. 5, 1908.
- Melander, Better Fr., Jan. 1908, 11.
- Melander, J. Ec. Ent. I, 217, 1908.
- Melander, J. Ec. Ent. II, 67, 1909.
- Melander, Northw. Hort., Apr. 1909, 72.
- Melander, Wash. Pop. B. 17, 1909.
- Melander, Better Fr., Jan. 1910, 65.
- Melander, Wash. Pop. B. 30, 1910.
- Melander, Wash. B. 103, 5, 1911.
- Melander, Better Fr., June 1912, 11.
- Melander, Cal. Hort. B. I, 3, 101, 1912.
- Melander, Northw. Hort., Apr. 1912, 98.
- Melander, Wash. Pop. B. 45, 1912.
- Melander, Or. Judd Farm., Feb. 10, 1912, 220.
- Melander, Northw. Hort., Apr. 1913, 100.
- Melander & Jenne, Wash. B. 77, 7, 1906.
- Melander & Jenne, Wash. B. 81, 3, 1907.
- Melander & Trumble, Wash. B. 86, 3, 1908.
- Moore, Wis. B. 190, 11, 1910.
- Moore, Wis. B. 207, 25, 1911.
- Morrill, S. W. Stockm., Jan. 20, 1911, 1.
- Morrill, S. W. Stockm., Feb. 24, 1911, 1.
- Morrill, S. W. Stockm., July 28, 1911, 1.
- Morrill, S. W. Stockm., Apr. 5, 1912, 3.
- Morrill, S. W. Stockm., May 9, 1913, 10.
- Morrill, S. W. Stockm., July 25, '13, 10.
- Morrill, S. W. Stockm., Sept. 26, '13, 10.
- Morrill, Ariz. Comm. Agr. & Hort. R. 6, 15, 1914.
- Morrill, Cal. Cult. XLII, 201, 1914.
- Morrill, S. W. Stockm., Jan. 16, '14, 15.
- Morrill, S. W. Stockm., Feb. 6, 1914, 10.
- Morrill, S. W. Stockm., Apr. 17, '14, 10.
- Morrill, S. W. Stockm., Aug. 28, '14, 10.
- Morris, Okla. B. 64, 2, 1905.
- Munson, Me. Dept. Agr. Quart. B., vol. IV, 1, 16, 1905.
- Newell & Smith, U. S. B. 52, 70, 1905.
- Nicholson, Okla. B. 76, 13, 1908.
- Niven, Prog. Farm., Mar. 18, 1911, 302.
- O'Kane, Inj. Ins. 337, 1914.
- Osborn, U. S. B. 52, 51, 1905.
- Parrott, N. Y. Dept. Agr. B. 50, 1737, 1913.
- Parrott, Pr. West. N. Y. Hort. Soc., 57 Meet., 122, 1912.
- Parry, Utah Bd. Hort. Bien., R. f., 1903-1904, 74, 1905.
- Patch, Me. B. 134, 221, 1906.
- Paull, Colo. Fr. Grow., July 1907, 6.
- Peairs, Md. Hort. Soc., 1908, 60, 1909.
- Peairs, J. Ec. Ent. V, 243, 1912.
- Pease, Cal. Cult., XXX, 572, 1908.
- Pettit, Conn. Farm., May 27, 1905, 6.
- Pettit, Mich. B. 222, 184, 1905.
- Pettit, Mich. Sp. B. 24, 305, 1905.
- Powers, Ill. Hort. Soc. f., 1906, 243.
- Powers, Or. Judd. Farm., Apr. 13, 1907, 516.
- Price, Va. C. 7, 14, 1909.
- Quayle, J. Ec. Ent. IV, 526, 1911.
- Quaintance, Mich. Hort. Soc., 1905-1906, 126, 1907.
- Quaintance, Pr. Ent. Soc. Wash. VIII, 110, 1907.
- Quaintance, U. S. Y. B., 1907, 435.
- Quaintance, U. S. B. 68, 69, 1908.
- Quaintance, J. Ec. Ent. V, 159, 1912.
- Quaintance, U. S. D. A. B. 88, 1, 1914.
- Quaintance, Jenne, Scott & Braucher, U. S. B. 80, 113, 1911.
- Quaintance & Scott, U. S. F. B. 492, 5, 1912.

Carpocapsa pomonella (*Cont'd*)

- Quaintance & Scott, U. S. B. 115, 87, '12.
 Reed, Ga. Hort. Soc. 30th Meet., 46, '06.
 Reed, Ga. Bd. Ent. B. 29, I, 3, 1909.
 Roberts, Better Fr., May 1907, 9.
 Rosenfeld, La. Hort. Soc., 1908, 111.
 Ruggles & Stakman, Minn. B. 121, 13, 1911.
 Rumsey, W. Va. R. f. 1904-1905, 12.
 Rumsey, W. Va. R. f. 1909-1910, 29.
 Rumsey, W. Va. R. f. 1909-1910, 149.
 Rumsey, W. Va. B. 127, 127, 1910.
 Rumsey & Brooks, W. Va. R. f. 1905-1906, 18.
 Sanderson, N. H. B. 129, 263, 1907.
 Sanderson, N. H. R. 19-20, 396, 1908.
 Sanderson, J. Ec. Ent. I, 129, 1908.
 Sanderson J. Ec. Ent. II, 135, 1909.
 Sanderson, Jr. Ec. Ent. II, 364, 1909.
 Sanderson, Rur. N. Y., 1909, 420.
 Sanderson, Ins. Pests, 624, 1912.
 Schoene & Fulton, N. Y. St. C. 25, 4, '13.
 Scott & Quaintance, U. S. F. B. 283, 23, 1907.
 Shepard, Better Fr., Apr. 1907, 9.
 Sherman, Ont. Ent. Soc. R. 36, 22, 1906.
 Sherman, Prog. Farm., Apr. 2, 1908, 17.
 Sherman, Prog. Farm., May 17, 1913, 617.
 Simpson, Oreg. Bd. Hort. 8th Bien. R. 249, 1905.
 Slingerland, Rur. N. Y., 1905, 57, 407.
 Slingerland, Rur. N. Y., 1906, 173.
 Slingerland, J. Ec. Ent. I, 352, 1908.
 Slingerland, Rur. N. Y., 1908, 953.
 Slingerland, Better Fr., June 1909, 29.
 Slingerland, N. Y. Fr. Grow. Assoc., 1909, 124.
 Slingerland & Crosby, N. Y. C. B. 252, 338, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 10, 1914.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 467, 1910.
 Smith N. J. R. f. 1904 (1905), 570.
 Smith, Ga. Bd. Ent. B. 20, 167, 1906.
 Smith, U. S. B. 67, 104, 1907.
 Smith, N. J. B. 213, 43, 1908.
 Smith, N. J. R., 1909, 393.
 Smith, N. C. B. 206, 73, 85, 1910.
 Smith, N. J. R., 1910, 311.
 Smith & Lewis, U. S. B. 60, 79, 1906.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 6.
 Stabler, Hull & Kells, Cal. Fr. Grow., Apr. 22, 1905, 5.
 Stabler, Cal. Fr. Grow., Apr. 11, '14, 5.
 Stene, R. I. Bd. Agr. R. 23, 28, 1908.
 Stene, R. I. Bd. Agr. R. 25, 149, 1910.
 Stephens, Col. Rur. World, Apr. 26, 1905, 131.
 Stephens, Green's Fr. Grow., Apr. 1906, 24.
 Stephens, Prai. Farm. LXXIX, 165, '07.
 Surface, Pa. D. A. Zoöl. B. II, 10 & 11, 329, 1905.
 Surface, Pa. D. A. Zoöl. B. V, 12, 366, 1908.
 Surface, Pa. Dept. Agr. R. 16, 121, '10.
 Swaine, Ont. Ent. Soc. R. 41, 94, 1911.
 Swenk, Nebr. Hort. Soc. B. 19, 3, 1908.
 Swenk, Nebr. Hort. Soc., 1909, 75.
 Symons, Md. B. 101, 141, 1905.
 Symons, Md. Hort. Soc., 1905, 62, 1906.
 Symons, U. S. B. 60, 83, 1906.
 Symons, Md. Hort. Soc., '09, 169, '10.
 Symons & Peairs, Md. B. 142, 135, '10.
 Taft, Mich. Bd. Agr. R. 45, 105, 1906.
 Taft, C. Gentl., 1908, 749.
 Taft, Nat'l Fr. Grow., July 1908, 2.
 Taft, Mich. Farm., May 22, 1909, v. 132, p. 568.
 Taylor, Colo. B. 119, 3, 1906.
 Taylor, Better Fr., Nov. 1907, 20.
 Taylor, Mo. Fr. Exp. Sta. B. 21, 18, '09.
 Taylor, Better Fr., Feb. 1911, 19.
 Taylor, Better Fr., Mar. 1911, 23.
 Taylor, Better Fr., Apr. 1911, 77.
 Thornber, Ariz. B. 57, 275, 1908.
 Treherne, Ont. Ent. Soc. R. 42, 20, '12.
 Treherne, Ont. Ent. Soc. R. 43, 108, '13.
 Troop, Ind. B. 102, 248, 1905.
 Troop, Ind. R. 26, 48, 1913.
 Troop, Ind. R. 27, 48, 1914.
 Troop & Woodbury, Ind. R. 22, 44, '09.
 Trumble, Wash. Hort. Assoc. 6th Ann. R. 36, 1910.
 Van Alstyne, Rur. N. Y., 1907, 170.
 Van Alstyne, Rur. N. Y., 1910, 624.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 478, 1911.
 Van Deman, Rur. N. Y., 1911, 661.
 Vincent, Col. Rur. World, May 24, 1911, 163.

Carpocapsa pomonella (*Cont'd*)

- Vincent, Deseret Farm., June 3, '11, 11.
 Volck, Cal. C. 14, 1905.
 Volck, Pac. Rur. Press, LXXI, 222, '06.
 Volck, Pac. Rur. Press, LXXII, 340, '06.
 Volck, Pac. Rur. Press, LXXIV, 85, '07.
 Volck, Cal. Cult. XXX, 137, 1908.
 Volck, Cal. Fr. Grow., Jan. 8, 1910, 5.
 Volck, Pac. Rur. Press, LXXIX, 144, 1910.
 Volck, Better Fr., Feb. 1911, 79.
 Volck, Better Fr., Jan. 1913, 16.
 Walden, The Ranch, Feb. 1, 1907, 4.
 Walden, The Ranch, Apr. 15, 1909, 5.
 Webster, J. Ec. Ent. V, 470, 1912.
 Weiss, N. J. R., 1912, 433.
 Weldon, Md. Hort. Soc., '07, 64, '08.
 Weldon, Colo. R. 22, 31, 1909.
 Weldon, Colo. Bd. Hort. R. f. 1910, 130, 1911.
 Weldon, Colo. R. Bd. Hort. f. 1911, 75.
 Weldon, Farm. Guide, Mar. 18, '11, 5.
 Weldon, Col. Rur. World, Mar. 6, 1912, 74.
 Weldon, Colo. Bd. Hort. R. f. '12, 49, '13.
 Weldon, Ind. Farm., Apr. 6, 1912, 4.
 Weldon, Cal. Hort. B. II, 8, 621, 1913.
 Wells, Nat'l Stockm. & Farm., June 25, 1908, 2.
 Whipple, Mont. Bd. Hort. f. 1909-1910, 18.
 White, Colo. Bd. Hort. R. f. 1905, 80, 1906.
 White, Field & Farm., Mar. 31, '06, 4.
 White, Iowa Home, Apr. 21, 1910, 919.
 Whiteside, Mont. Bd. Hort. f. 1905-1906, 29, 1907.
 Wilken, Mich. Farm., Jan. 18, 1913, v. 140, p. 28.
 Wilken, Mich. Farm., June 7, 1913, v. 140, p. 654.
 Williard, S. W. Stockm., Jan. 30, '14, 1.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 108.
 Wilson, Better Fr., June, 1914, 33.
 Woglum, N. C. Ent. C. 20, 1907.
 Woodworth, Oreg. Bd. Hort. 8th Bien. R. 261, 1905.
 Woodworth, J. Ec. Ent. III, 470, 1910.
 Woodworth, Cal. C. 101, 1913.
 Worsham, Ga. Bd. Ent. B. 27, 78, 1908.
 Worsham, Pr. Ga. Hort. Soc., 1908, 78.
 Worsham, J. Ec. Ent. II, 208, 1909.
 ——— Cal. Fr. Grow., Feb. 10, '06, 5.
 ——— Colo. R. Bd. Hort. f. '09, 145.
 ——— Conn. Farm., Dec. 30, '05, 12.
 ——— C. Gentl., 1906, 1211.
 ——— Farm. World, Can., 1907, 515.
 ——— Mich. Farm., July 29, 1905, 71.
 ——— Mich. Sp. B. 57, 524, 1912.
 ——— Mont. Bd. Hort. f. 1903-1904, 90, 1905.
 ——— Mont. Bd. Hort., '07-'08, 25, '09.
 ——— Northw. Hort., Feb. 1907, 59.
 ——— Northw. Hort., Apr. 1908, 77.
 ——— Pac. Rur. Press LXIX, 206, '05.
 ——— Pac. Rur. Press, LXXII, 99, '06.
 ——— Rur. N. Y., 1909, 360.
 ——— Rur. N. Y., 1912, 393.
 ——— U. S. Y. B., 1905, 633.
 ——— U. S. Y. B., 1906, 512.
 ——— U. S. Y. B., 1907, 546.
 ——— U. S. Y. B., 1908, 575.
 ——— Wyo. St. Bd. Hort. 3rd Bien. R. 34, 1909-1910.
 ——— Wyo. Bd. Hort. 5th Bien. R., 45, 1913-1914.
- Carpocapsa pomonella and birds**
 McAtee, U. S. Y. B., 1911, 237.
- Carpocapsa pomonella, cider trap**
 Herrick, Rur. N. Y., 1911, 458, 643.
- Carpocapsa pomonella, dry spray**
 Judd, Cal. Cult., XXIX, 550, 1910.
- Carpocapsa pomonella in nuts**
 Foster, U. S. B. 80, 67, 1910.
- Carpocapsa pomonella, parasites**
 Bethune, Ont. Agr. Coll. B. 158, 4, '07.
 Cushman, J. Agr. Res. I, 211, 1913.
 Doten, Nev. R. f., 1912, 36.
 Taylor, Colo. Fr. Grow., Sept. Oct. '10, 9.
 ——— Better Fr., Oct. 1910, 53.
 ——— C. Gentl., 1906, 546.
 ——— Prai. Farm., July 6, 1905, 4.
 ——— Prai. Farm., July 13, 1905, 4.
- Carpocapsa salitans**
 Howard, U. S. B. 54, 81, 1905.
- Carpoglyphus passularum**
 ——— U. S. Y. B., 1908, 580.
- Carpophilus antiquus**
 Forbes, Ill. Ent. R. 23, 181, 1905.
- Carpophilus dimidiatus**
 Forbes, Ill. Ent. R. 23, 181, 1905.
 Newell & Smith, U. S. B. 52, 71, 1905.
 Quayle, U. S. D. A. B. 134, 11, 1914.

- Carpophilus hemipterus*
Johannsen, Me. B. 177, 39, 1910.
—— U. S. Y. B., 1907, 552.
- Carpophilus mutilatus*
—— Fla. R., 1906, xviii.
- Carpophilus pallipennis*
Forbes, Ill. Ent. R. 23, 181, 1905.
- Carpophilus* sp.
Johannsen & Patch, Me. B. 195, 233, '11.
- Carrot rust-fly, *see* *Psila rosae*
- Car-Sul
U. S. D. A. Ins. & Fung. Bd., Ins. 3, p. 43, 1914.
- Cartodere ruficollis*
Cooley, Mont. B. 98, 127, 1914.
Forbes, Ill. Ent. R. 23, 182, 1905.
- Casebearers
Beach, Iowa B. 127, 55, 1912.
- Case-making clothes moth, *see* *Tinea pellionella*
- Cassida bivittata*
Chittenden, Ins. Inj. Veg. 239, 1907.
Riddle-Smyth, Kans. Farm., July 18, 1907, 834.
Sanderson, Ins. Pests, 433, 1912.
Smith, N. J. B. 229, 9, 1910.
Surface, Pa. D. A. Zoöl. II, 5, 207, 1912.
Symons, Md. B. 101, 178, 1905.
- Cassida nigripes*
Chittenden, Ins. Inj. Veg. 239, 1907.
Sanderson, Ins. Pests, 434, 1912.
Smith, N. J. B. 229, 11, 1910.
Symons, Md. B. 101, 178, 1905.
- Cassida* spp.
O'Kane, Inj. Ins. 155, 1914.
Smith, N. J. Ent. C. 31.
Smith, N. J. R., 1908, 348.
Smith, N. J. B. 229, 8, 1910.
- Castnia licus*
Holloway, U. S. C. 165, 2, 1912.
Marlatt, U. S. B. 54, 71, 1905.
- Catabomba*, *see* *Lasiophthicus*
- Catalpa*, *insects of*
Cotton, Ohio Nurs. Orch. Insp. B. 7, 48, 1906.
- Catalpa sphinx*, *see* *Ceratonia catalpae*
- Cathartus advena*
Dean, Kans. Agr. Educ. I, 4, 51, 1909.
Dean, Kans. B. 189, 204, 1913.
Dietz, Ind. Ent. R. 6, 93, 1914.
Sanderson, Ins. Pests, 188, 1912.
—— U. S. Y. B., 1908, 579.
- Cathartus cassiae*, *see* *C. gemellatus*
- Cathartus gemellatus*
Dean, Kans. Agr. Educ. I, 4, 51, 1909.
Dean, Kans. B. 189, 204, 1913.
Dietz, Ind. Ent. R. 6, 92, 1914.
Hinds, Ala. Poly. B. 176, 52, 1914.
Hunter & Pierce, U. S. B. 114, 138, '12.
Pierce, U. S. B. 73, 30, 1908.
Pierce, U. S. B. 100, 68, 1912.
Sanderson, Ins. Pests, 188, 1912.
Tucker, Can. Ent., 1911, 26.
—— U. S. Y. B., 1908, 579.
- Cat flea, *see* *Ctenocephalus felis*
- Catocala maestosa*
—— U. S. Y. B., 1905, 636.
- Catocala piatrix*
Gossard, Fla. B. 79, 296, 1905.
- Catocala* spp.
Chittenden, Nut Grow., Feb. 1906, 118.
- Catocala viduata*
Gossard, Fla. B. 79, 297, 1905.
- Catogenes rufus*
Felt, N. Y. St. Mus. Mem. 8, 489, 1906.
Fiske, Pr. Ent. Soc. Wash. VII, 90, '05.
- Catolaccus anthonomi*
Smith, N. J. B. 225, 16, 1909.
- Catolaccus hunteri*
Hunter & Pierce, U. S. B. 114, 141, '12.
Pierce, U. S. B. 100, 51, 1912.
- Catolaccus incertus*
Hunter & Hinds, U. S. B. 51, 145, 1905.
Hunter & Pierce, U. S. B. 114, 141, '12.
Pierce, J. Ec. Ent. I, 119, 1908.
Pierce, U. S. B. 73, 29, 37, 1908.
Pierce, U. S. B. 100, 51, 1912.
- Catorama impressifrons*
—— U. S. Y. B., 1905, 630.
- Catorama tabaci*
Schwarz, Pr. Ent. Soc. Wash. XV, 89, 1913.
- Cattle louse, *see* *Trichodectes scalaris*
- Cattle-tick, *see* *Margaropus annulatus*
- Cauliflower pyralid, *see* *Pachyzancla bipunctalis*
- Caulophilus latinasus*
Chittenden, U. S. B. 96, 19, 1911.
- Caustic potash
Jarvis, Conn. Storrs B. 54, 187, 1908.
- Caustic soda
Smith, N. J. R., 1904, 638.
Smith, N. J. R., 1906, 606.

- Caustic soda lye, labelling*
 ——— U. S. D. A. Ins. & Fung. Bd. Ins.
 1, p. 2, 1914.
- Caustic soda and water*
 Britton, Conn. R. 4, 247, 1905.
- Cecidomyia balsamicola*
 Felt, N. Y. St. Mus. Mem. 8, 685, 1906.
- Cecidomyia caryae*
 Rosenfeld, J. Ec. Ent. III, 216, 1910.
- Cecidomyia caryaecola*
 Felt, N. Y. St. Mus. Mem. 8, 628, 1906.
- Cecidomyia catalpae*
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 52,
 1906.
 Douglass, Ind. Ent. R. 2, 93, 1910.
 Gossard, J. Ec. Ent. I, 181, 1908.
 Gossard, Ohio B. 197, 1, 1908.
 Houser, Ohio B. 194, 193, 1908.
 ——— U. S. Y. B., 1908, 577.
- Cecidomyia coccidarum*
 Chittenden, U. S. C. 104, 6, 1909.
- Cecidomyia destructor*, *see* *Mayetiola de-*
structor
- Cecidomyia erubescens*
 Felt, N. Y. St. Mus. Mem. 8, 627, 1906.
- Cecidomyia gleditschiae*
 Britton, Conn. R. 4, 213, 1905.
- Cecidomyia grossulariae*, *see* *Dasyneura*
grossulariae
- Cecidomyia hirtipes*
 Felt, N. Y. R. 20, 410, 1905.
- Cecidomyia holotricha*
 Felt, N. Y. St. Mus. Mem. 8, 628, 1906.
- Cecidomyia hortuella*
 Smith, N. J. R., 1911, 439.
- Cecidomyia johnsoni*, *see* *Contarinia*
- Cecidomyia leguminicola* *see* *Dasyneura*
leguminicola
- Cecidomyia ocellaris*
 Felt, N. Y. St. Mus. Mem. 8, 629, 1906.
- Cecidomyia oxycoccana*
 Hardenberg, Wis. B. 159, 13, 1908.
 Hardenberg & Malde, Wis. R. 24, 311,
 1907.
 Peltier, Wis. Cranb. Grow. Assoc., 25th
 Meet., 11, 1912.
 Slingerland & Crosby, Man. Fr. Ins.
 465, 1914.
 Smith, N. J. R., 1911, 440.
- Cecidomyia pellex*
 Felt, N. Y. St. Mus. Mem. 8, 632,
 1906.
- Cecidomyia pilulae*
 Felt, N. Y. St. Mus. Mem. 8, 627, 1906.
- Cecidomyia pini-rigidiae*
 Felt, N. Y. St. Mus. Mem. 8, 423, 1906.
- Cecidomyia resinicola*
 Felt, N. Y. St. Mus. Mem. 8, 410, 1906.
- Cecidomyia robiniae*
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 26,
 1906.
- Cecidomyia sorghicola*, *see* *Contarinia*
sorghicola
- Cecidomyia strobiloides*
 Harned, Pr. Columbus Hort. Soc., 1906,
 110.
 Patch, Me. B. 109, 180, 1905.
- Cecidomyia tritici*, *see* *Diplosis tritici*
- Cecidomyia trifolii*, *see* *Dasyneura trifolii*
- Cecidomyia tubicola*
 Felt, N. Y. St. Mus. Mem. 8, 628, 1906.
- Cecidomyia vaccinii*
 Hardenburg & Malde, Wis. Cranb.
 Grow. Assoc., 21st Meet. 12, 1908.
 Whitson, Sandsten, Haskins & Ramsey,
 Wis. B. 119, 44, 1905.
- Cecidomyia verrucicola*
 Felt, N. Y. St. Mus. Mem. 8, 631, 1906.
- Cecidomyia viticola*
 Felt, J. Ec. Ent. VII, 339, 1914.
- Cecidomyiidae*
 Felt, J. Ec. Ent. I, 18, 1908.
 Felt, J. Ec. Ent. II, 286, 1909.
- Cecropia moth*, *see* *Samia cecropia*
- Cedar bark-beetle*, *see* *Phloeosinus denta-*
tus
- Cedar borer*, *see* *Hylotrupes ligneus*
- Cedar of Lebanon and Camphor*
 U. S. D. A. Ins. & Fung. No. 24, 1913.
- Cedar tree borer*, *see* *Hylotrupes ligneus*
- Celama sorghiella*
 Forbes, Ill. Ent. R. 23, 160, 1905.
 ——— U. S. Y. B., 1906, 510.
 ——— U. S. Y. B., 1908, 570.
- Celatoria diabroticae*
 Chittenden, U. S. C. 59, 5, 1905.
 Chittenden, U. S. C. 31, 2nd Ed. 4, 1909.
 Chittenden, U. S. B. 82, 72, 1910.
 Essig, Cal. Hort. B. II, 1-2, 258, 1913.
 Isaac, Bug vs. Bug, 24, 1906.
 Webster, U. S. D. A. B. 5, 9, 1913.
 Webster, U. S. D. A. B. 8, 6, 1913.
- Celerio lineata*, *see* *Deilephila lineata*
- Celery caterpillar*, *see* *Papilio polyxenes*

Celery insects

Pettit, Mich. Special B. 60, 343, 1913.

Celery leaf-tyer, see *Phlyctaenia rubigalis***Celery looper, see *Plusia simplex*****Cement wash**

Smith, N. J. B. 213, 37, 1908.

Cemonus inornatus

Treherne, Ont. Ent. Soc. R. 41, 21, '11.

Cenopsis pettitana

Caesar, Ont. Ent. Soc. R. 43, 83, 1913.

Felt, N. Y. St. Mus. Mem. 8, 579, 1906.

Gibson, Ont. Ent. Soc. R. 42, 14, 1912.

Gibson, Ont. Ent. Soc. R. 43, 16, 1913.

Cenopsis reticulatana

Felt, N. Y. St. Mus. Mem. 8, 580, 1906.

Centrodera decolorata

Felt, N. Y. St. Mus. Mem. 8, 456, 1906.

Centrurus exilicauda

Jackson, Interst. Med. Jr., July '10, 485.

Cephus occidentalis

Criddle, J. Ec. Ent. IV, 237, 1910.

Criddle, J. Ec. Ent. V, 250, 1912.

Criddle, Ont. Ent. Soc. R. 43, 98, 1913.

Criddle, Nor'-West Farm., Dec. 20,

1907, 1157.

Fletcher, Can. Exp. Farms B. 52, 16, '05.

Fletcher, Farm. Advocate, Can., 1907,

1824.

O'Kane, Inj. Ins. 129, 1914.

Sanderson, Ins. Pests, 130, 1912.

Webster & Reeves, U. S. C. 117, 1, '10.

——— Nor'-West Farm., Sept. 5, 1907,
835.

Cephus pygmaeus

Gossard, Ohio B. 233, 68, 1911.

Sanderson, Ins. Pests, 129, 1912.

Cerambycobius cushmani

Hunter & Pierce, U. S. B. 114, 141, 1912.

Pierce, U. S. B. 100, 51, 1912.

Tucker, U. S. B. 64, 63, 1909.

Cerambycobius cyaniceps

Hunter & Pierce, U. S. B. 114, 141, '12.

Pierce, J. Ec. Ent. I, 119, 1908.

Pierce, U. S. B. 73, 29, 36, 1908.

Pierce, U. S. B. 100, 50, 1912.

Cerambycobius sp., on boll weevil

Hunter & Pierce, U. S. B. 114, 141,
1912.

Pierce, U. S. B. 100, 51, 1912.

Cerambycobius sp., on plum curculio

Quaintance & Jenne, U. S. B. 103, 148,
1912.

Ceraphron sp.

Herrick & Hungate, N. Y. C. B. 300,
736, 1911.

Ceratitis capitata

Back, U. S. D. A. B. 161, 1914.

Brenner, Cal. Hort. Comm. Fruit Fly,
3, 1911.

Carnes, Cal. Hort. B. I, 1, 7, 1911.

Compere, Rur. Calif., Jan. 1911, 5.

Compere, Cal. Hort. B. I, 4, 143, 1912.

Cook, Pom. Jr. Ent. III, 576, 1911.

Cook, Cal. Cult., XXXIX, 172, 1912.

Essig, Pac. Rur. Press, LXXXIV, 199,
1912.

Giffard, Cal. Hort. B. I, 7, 326, 1912.

Giffard, Cal. Hort. I, 10, 814, 1912.

Howard, U. S. R. Ent., 1913, 12.

Howard, U. S. R. Ent., 1914, 15.

Marlatt, U. S. Fed. Hort. Bd. R. 1913.

Marlatt, U. S. Fed. Hort. Bd. R. 4, '14.

Maskew, Cal. Hort. B. III, 6, 227, 1914.

Quayle, U. S. D. A. B. 134, 1, 1914.

Severin, Ann. Ent. Soc. Am. V, 400, '12.

Severin, Cal. Hort. B. I, 9, 558, 1912.

Severin, J. Ec. Ent. VI, 347, 1913.

Severin, J. Ec. Ent. VI, 68, 399, 1913.

Severin, Can. Ent., 1914, 243.

Severin, Jr. N. Y. Ent. Soc. XXII, 240,
1914.

Severin & Hartung, Cal. Hort. B. I, 9,
566, 1912.

Severin & Hartung, J. Ec. Ent. V, 443,
1912.

Waterbury, Cal. Cult., XXXVIII, 292,
1912.

Weinland, Cal. Hort. B. I, 5, 156, 1912.

Weinland, Cal. Hort. B. I, 7, 261, 1912.

Weinland, Cal. Hort. B. I, 9, 570, 1912.

Weinland, Pom. Jr. Ent. IV, 821, 1912.

Wilson, Oreg. Bien. Crop Pest R. f.,
1911-1912, 170.

——— Cal. Cult. XXIX, 315, 1907.

——— Cal. Hort. B. I, 7, 335, 1912.

——— C. Gentl., Mar. 16, 1912, 11.

——— Pac. Rur. Press, LXXXIII, 608,
1912.

——— Pac. Rur. Press LXXXIV, 253,
1912.

——— U. S. Fed. Hort. Bd. Quar. No.
2, 1912.

——— U. S. B. Fed. Hort. Bd. Mar. 25,
1914.

Ceratitis capitata, parasite

Cook, Cal. Cult., XL, 257, 1913.

Smith, Cal. Cult., XLI, 52, 1913.

Ceratitis capitata, quarantine

Cook, Cal. Hort. Comm. Bien. R. 5, 12, 1912.

Cook, Cal. Hort. Comm. Statutes, 1912, 26.

Maskew, Cal. Hort. B. I, 9, 583, 1912.

Maskew, Cal. Hort. B. II, 8, 633, 1913.

——— Fla. Dept. Agr. Quart. B. 4, vol. 22, 47, 1912.

——— J. Ec. Ent. V, 420, 1912.

Ceratomia amyntor

Felt, N. Y. St. Mus. Mem. 8, 546, 1906.

Ceratomia catalpae

Burgess, Ohio Bd. Agr. R. 60, 609, 1905.

Burgess, Ohio Nurs. Orch. Insp. R. 4, 13, 1906.

Burgess, Ohio Bd. Agr. R. 61, 660, 1906.

Burgess, Ohio Hort. Soc., 1906, 54.

Burgess, U. S. B. 60, 73, 1906.

Burgess, Ohio Nurs. Orch. Insp. R. 5, 20, 1907.

Cotton, Ohio Nurs. Orch. Insp. B. 7, 48, 1906.

Douglass, Ind. Ent. R. 2, 43, 1910.

Douglass, Ind. Ent. R. 3, 217, 1910.

Douglass, Ind. Ent. R. 4, 124, 1912.

Forbes, Ill. B. 151, 464, 1911.

Forbes, Ill. Ent. R. 26, 2, 1911.

Girault, Ent. News, 1908, 197.

Holland, Ent. News, 1905, 280.

Houser, Ohio B. 194, 192, 1908.

Howard & Chittenden, U. S. C. 96, 1, 1907.

Rumsey & Brooks, W. Va. R. f. 1905-1906, 25.

Shaw, Ohio Bd. Agr. R. 65, 1910, 544.

Smith, N. J. R., 1906, 525.

Smith, U. S. B. 67, 37, 1907.

Smith, N. J. R., 1908, 316.

Smith, N. C. R. 33, 32, 1910.

Symons, U. S. B. 60, 84, 1906.

Weiss & Paterson, N. J. C. 15, 10, 1912.

Woodbury, Ind. Bd. Agr. R. 56, 470, '07.

——— U. S. Y. B., 1906, 514.

——— U. S. Y. B., 1907, 550.

Ceratomia trifurcata

Weldon, Md. Hort. Soc., 1907, 66, 1908.

Ceratomia undulosa

Felt, N. Y. St. Mus. Mem. 8, 548, 1906.

Ceratomyza dorsalis

Forbes, Ill. Ent. R. 23, 165, 1905.

Ceratophorus tenax

Gibson, Ont. Ent. Soc. R. 44, 20, 1914.

Ceratophyllus acutus

Doane, Ins. Disease, 156, 1910.

McCoy, Pub. Health R. XXIV, 194, 1908.

McCoy, Pub. Health R. XXV, 659, 1910.

Mitzmain, Ann. Ent. Soc. Am. III, 61, 1910.

Mitzmain, Publ. Health B. 38, 1910.

Simpson, Pub. Health R. XXV, 250, '10.

Ceratophyllus fasciatus

Banks, Publ. Health Mar. Hosp. Service B. 30, 74, 1910.

Doane, Ins. Disease, 154, 1910.

Fox, Publ. Health Mar. Hosp. Service B. 30, 136, 1910.

Mitzmain, Ent. News, 1908, 353.

Mitzmain, Publ. Health B. 38, 1910.

Ceratophyllus fasciatus, bites man

McCoy, Pub. Health R. XXIV, 189, '08.

Ceratophyllus gallinae

Herrick, J. Ec. Ent. VI, 84, 1913.

Ceratopogon guttipennis

Herrick, Household Ins. 332, 1914.

Pratt, U. S. B. 64, 23, 1907.

Ceratopogon stellifer

Herrick, Household Ins. 329, 1914.

Ceratopogon spp.

Felt, J. Ec. Ent. VI, 285, 1913.

Pratt, U. S. B. 64, 26, 1907.

Surface, Pa. D. A. Zoöl. III, 1, 23, 1913.

Whitmarsh, Ohio B. 253, 143, 1912.

Ceratopogon and Pellagra

Hunter, J. Ec. Ent. V, 61, 1912.

Ceresa borealis

Gossard, Ohio B. 233, 96, 1911.

Hodgkiss, N. Y. St. Techn. B. 17, 105, 1910.

Ceresa bubalus

Adams, Ark. B. 92, 7, 1907.

Baldwin, Ind. Ent. R. 5, 72, 1912.

Beach, Iowa B. 127, 54, 1912.

Brown, Iowa Home, May 31, 1906, 878.

Cooley, Mont. B. 79, 53, 1910.

Cooley, Mont. B. 92, 56, 1912.

Cotton, Ohio Nurs. Orch. Insp. B. 7, 31, 1906.

Dean & Peairs, Kans. Agr. Educ. VI, 2, 23, 1913.

- Douglass, Ind. Ent. R. 3, 108, 1910.
 Felt, N. Y. R. 20, 407, 1905.
 Felt, U. S. B. 52, 51, 1905.
 Felt, N. Y. St. Mus. Mem. 8, 591, 1906.
 Fletcher, Ont. Ent. Soc. R. 36, 89, 1906.
 Garman, Ky. B. 133; 59, 1908.
 Gossard, Ohio B. 164, 19, 1905.
 Gossard, O. Farm., Feb. 24, 1906, 208.
 Gossard, Ohio B. 233, 95, 1911.
 Haseman, Mo. Hort. Soc., 1911, 231.
 Hodgkiss, N. Y. St. Techn. B. 17, 92, 1910.
 Lochhead, Ont. Agr. Coll. B. 144, 29, 1905.
 Lochhead, Ont. Ent. Soc. R. 43, 86, 1913.
 Lochhead, Syn. Ec. Ent. 47, 1914.
 O'Kane, Inj. Ins. 253, 1914.
 Sanderson, Ins. Pests, 547, 1912.
 Severin, S. D. Hort. Soc. 9th R., 118, '12.
 Severin, S. D. Hort. Soc. 11th R., 20, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 160, 1914.
 Stedman, Mo. Hort. Soc., 1905, 55.
 Surface, Pa. D. A. Zool. VI, 2, 38, 1908.
 Swaine, Ont. Ent. Soc. R. 41, 92, 1911.
 Swenk, Nebr. Hort. Soc. B. 19, 21, 1908.
 Swenk, Nebr. Hort. Soc., 1909, 84.
 Washburn, Minn. R. 12, 143, 1908.
 Washburn, Minn. Ent. R. 13, 100, 1910.
 Webster, J. Ec. Ent. II, 212, 1909.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 150.
- Ceresa sp.**
 Gillette, Colo. B. 114, 13, 1906.
 Gillette, Better Fr. Feb. 1910, 18.
- Ceresa taurina**
 Gossard, Ohio B. 233, 96, 1911.
 Hodgkiss, N. Y. St. Techn. B. 17, 100, 1910.
- Webster, J. Ec. Ent. II, 193, 1909.
- Cerchysius sp.**
 Quayle, Cal. B. 223, 187, 1911.
- Cerchysius sp. on soft scale**
 Timberlake, J. Ec. Ent. VI, 301, 1913.
- Cerococcus ehrhorni**
 Doane, J. Ec. Ent. V, 348, 1912.
- Cerodontha dorsalis**
 Phillips, J. Agr. Res. II, 19, 1914.
- Ceroplastes ceriferus**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 183, 1907.
- Essig, Cal. Hort. B. II, 1-2, 111, 1913.
- Ceroplastes cirripediformis**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 181, 1907.
 Essig, Cal. Hort. B. II, 1-2, 112, 1913.
 Newell & Barber, U. S. B. 122, 62, 65, 1913.
- Ceroplastes floridensis**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 182, 1907.
 Essig, Cal. Hort. B. II, 1-2, 112, 1913.
 Newell & Barber, U. S. B. 122, 65, 1913.
 Titus, U. S. B. 52, 80, 1905.
- Ceroplastes irregularis**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 183, 1907.
- Ceroputo bahiae**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 174, 1907.
- Ceroputo yuccae**
 Essig, Cal. Hort. B. II, 1-2, 95, 1913.
 Essig, Cal. Hort. B. III, 3, 123, 1914.
- Cerotoma trifurcata**
 Barre & Conradi, S. C. B. 141, 26, 1909.
 Chittenden, Ins. Inj. Veg. 110, 1907.
 Garcia, N. Mex. B. 68, 27, 1908.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 111, 1909.
 O'Kane, Inj. Ins. 147, 1914.
 Rosenfeld, J. Ec. Ent. III, 214, 1910.
 Sanborn, Okla. B. 100, 13, 1912.
 Sanderson, Ins. Pests, 313, 1912.
 Smith, N. C. B. 197, 14, 1908.
 ——— U. S. Y. B., 1908, 571.
- Ceruchus piceus**
 Felt, N. Y. St. Mus. Mem. 8, 492, 1906.
- Cerylon castaneum**
 Felt, N. Y. St. Mus. Mem. 8, 489, 1906.
- Ceutorhynchus rapae**
 Gossard, Ohio Hort. Soc., 1914, 109.
 Manns, Ohio B. 228, 281, 1911.
 O'Kane, Inj. Ins. 137, 1914.
 Pettit, Mich. B. 233, 173, 1906.
 Pettit, Mich. B. 244, 220, 1907.
 Sanderson, Ins. Pests, 377, 1912.
- Ceutorhynchus sp.**
 Pierce, U. S. B. 100, 79, 1912.
- Ceuthophilus pacificus**
 Popenoe, U. S. C. 155, 9, 1912.

Chaetocnema confinis

- Chittenden, Ins. Inj. Veg. 240, 1907.
 Forbes, Ill. Ent. R. 23, 110, 1905.
 O'Kane, Inj. Ins. 161, 1914.
 Sanderson, Ins. Pests, 430, 1912.
 Smith, N. J. R., 1907, 429.
 Smith, N. J. R., 1908, 345.
 Smith, N. J. B., 229, 4, 1910.
 Symons, Md. B. 101, 176, 1905.
 Troop, Farm. Guide. July 6, 1912, 20.

Chaetocnema denticulata

- Chittenden, Ins. Inj. Veg. 212, 1907.
 Forbes, Ill. Ent. R. 23, 110, 1905.

Chaetocnema ectypa

- Morrill, Ariz. Comm. Agr. & Hort. R. 6,
 33, 1914.
 ——— U. S. Y. B., 1908, 571.

Chaetocnema elongatula

- Quayle, J. Ec. Ent. IV, 527, 1911.

Chaetocnema parcepunctata

- Forbes, Ill. Ent. R. 23, 191, 1905.
 Pettit, Mich. B. 233, 180, 1906.
 Smith, N. C. R. 34, 35, 1911.

Chaetocnema pulicaria

- Chittenden, Ins. Inj. Veg. 211, 1907.
 Forbes, Ill. Ent. R. 23, 109, 1905.
 Smith, N. C. R. 34, 35, 1911.

Chaetopsis aenea

- Baldwin, Ind. Ent. R. 5, 148, 1912.
 Chittenden, U. S. Y. B., 1912, 329.
 Forbes, Ill. Ent. R. 23, 164, 1905.
 Pettit, Mich. B. 233, 187, 205, 1906.
 Sanderson, Ins. Pests, 423, 1912.
 Tucker, Can. Ent., 1911, 28.
 Washburn, J. Ec. Ent. III, 168, 1910.
 ——— U. S. Y. B., 1906, 511.

Chaff scale, see Parlatoria pergandei**Chain spotted geometer, see Cingilia catenaria****Chaitophorus aceris**

- Felt, N. Y. St. Mus. Mem. 8, 174, 1905.
 Felt, N. Y. R. 25, 78, 1910.
 Morrison, Ind. Ent. R. 5, 214, 1912.
 Smith, N. J. T., 1909, 375.

Chaitophorus betulae

- Gillette, J. Ec. Ent. III, 367, 1910.

Chaitophorus delicata

- Patch, Me. B. 213, 80, 1913.

Chaitophorus flavus

- U. S. Y. B., 1907, 543.

Chaitophorus negundinis

- Bruner, Nebr. Ent. R. f., '07-'08, 8.

Davidson, J. Ec. Ent. III, 376, 1910.

Davis, Ann. Ent. Soc. Am. I, 130, 1908.

Felt, N. Y. R. 25, 79, 1910.

Smith, Nebr. C. Ins. Pest. Bur. 1, 1, '08.

Smith, Nebr. Bd. Agr. R. f., 1908, 322.

Swenk, Nebr. Hort. Soc., 1909, 103.

Tucker, Kans. Farm., June 15, '05, 623.

Webster, J. Ec. Ent. II, 212, 1909.

Webster, J. Ec. Ent. III, 503, 1910.

——— U. S. Y. B., 1908, 578.

Chaitophorus populicola, see Thomasia**Chaitophorus populifoliae**

Davidson, J. Ec. Ent. III, 375, 1910.

Chaitophorus salicicola

Essig, Pom. Jr. Ent. III, 532, 1911.

Chaitophorus testudinatus

Oestlund, Ent. News, 1908, 131.

Chaitophorus viminalis

Patch, Me. B. 213, 80, 1913.

Chalcis callipus

Howard & Fiske, U. S. B. 91, 240, 1911.

Chalcis compsilurae

Howard & Fiske, U. S. B. 91, 145, 240,
 1911.

Chalcis fiskei

Howard & Fiske, U. S. B. 91, 212, 240,
 1911.

Chalcis flavipes

Howard, U. S. Y. B., 1905, 132.

Howard, U. S. R. Ent., 1911, 11.

Howard & Fiske, U. S. B. 91, 240, 1911.

Chalcis fonscolombei

Howard & Fiske, U. S. B. 91, 241, 1911.

Chalcis minuta

Howard & Fiske, U. S. B. 91, 241, 1911.

Chalcis obscurata

Howard & Fiske, U. S. B. 91, 240, 1911.

Chalcis ovata

Ainslie, U. S. B. 85, 88, 1910.

Hunter, Pr. Ent. Soc. Wash. XIV, 63,
 1912.

Smith, N. C. B. 214, 121, 1911.

Swenk, Nebr. C. Ins. Pest. Bur. C. 6, 4,
 1908.

Wildermuth, U. S. C. 133, 8, 1911.

Wildermuth, U. S. D. A. B. 124, 21, '14.

Chalcis paraplesia

Howard & Fiske, U. S. B. 91, 241, 1911.

Chalcodermus aeneus

Ainslie, U. S. B. 85, 129, 1910.

Hinds, Ala. Poly. R. 20, 37, 1908.

Hinds, Ala. Poly. B. 146, 101, 1909.

- Newell & Rosenfeld, J. Ec. Ent. I, 152, 1908.
- Newell & Smith, U. S. B. 52, 70, 1905.
- O'Kane, Inj. Ins. 211, 1914.
- Pierce, U. S. B. 73, 47, 1908.
- Pierce, U. S. B. 100, 77, 1912.
- Rosenfeld, J. Ec. Ent. III, 213, 1910.
- Sanborn, Okla. B. 100, 40, 1912.
- Sanderson, U. S. B. 57, 31, 1906.
- Sanderson, U. S. F. B. 223, 22, 1905.
- Sherman, N. C. Dept. Agr. B., 29, 6, 21, 1908.
- Smith, U. S. B. 67, 101, 1907.
- Tucker, J. Ec. Ent. II, 374, 1909.
- U. S. Y. B., 1907, 544.
- U. S. Y. B., 1908, 570.
- Chalcophora campestris**
Burke, U. S. Y. B., 1909, 414.
- Chalcophora liberta**
Felt, N. Y. St. Mus. Mem. 8, 654, 1906.
- Chalcophora virginicensis**
Burke, U. S. Y. B., 1909, 412.
- Buttrick, J. Ec. Ent. V, 458, 1912.
- Felt, N. Y. St. Mus. Mem. 8, 653, 1906.
- Chalepus dorsalis**
Burgess, Ohio Bd. Agr. R. 60, 610, 1905.
- Burgess, Ohio Nurs. Orch. Insp. R. 4, 14, 1906.
- Burgess, U. S. B. 60, 72, 1906.
- Cory, Md. Hort. Soc., 1912, 190, 1913.
- Cotton, Ohio Nurs. Orch. Insp. B., 7, 15, 1906.
- Felt, N. Y. St. Mus. Mem. 8, 325, 1905.
- Felt, J. Ec. Ent. V, 411, 1912.
- Felt, N. Y. R. 27, 59, 1912.
- Felt, N. Y. R. 28, 100, 1913.
- Houser, Ohio Hort. Soc., 1913, 29.
- Garman, J. Ec. Ent. V, 468, 1912.
- Holland, Ent. News, 1907, 454.
- Houser, Ohio B. 194, 195, 1908.
- Shaw, Ohio Bd. Agr. R. 63, 1908, 695.
- Shaw, Ohio Nurs. Orch. Insp. R. 7, 17, 1909.
- Symons & Cory, Md. B. 175, 178, 1913.
- Thorne, Ohio B. 263, xxi, 1913.
- U. S. Y. B., 1905, 632.
- Chalepus nervosa**
Felt, N. Y. R. 27, 63, 1912.
- Chalepus rubra**
Caesar, Ont. Ent. Soc. R. 42, 34, 1912.
- Chalepus sp. on populus**
Cooley, Mont. B. 64, 42, 1906.
- Chariessa pilosa**
Felt, N. Y. St. Mus. Mem. 8, 504, 1906.
- Chariesterus antennator**
Morrill, U. S. B. 86, 91, 1910.
- Charips xanthopsis**
Essig, Pom. Jr. Ent. III, 616, 1911.
- Essig, Cal. Hort. B. I, 7, 294, 1912.
- Essig, Cal. Hort. B. II, 1-2, 266, 1913.
- Chauliognathus marginatus**
Garman & Jewett, Ky. B. 187, 580, 1914.
- Quaintance, U. S. Y. B., 1907, 443.
- Chauliognathus pennsylvanicus**
Ainslie, U. S. F. B. 634, 7, 1914.
- Quaintance & Jenne, U. S. B. 103, 154, 1912.
- Reed, Ga. Bd. Ent. B. 29, 20, 1909.
- Smith, N. C. B. 214, 122, 1911.
- Chauliognathus spp.**
Hunter & Pierce, U. S. B. 114, 137, 1912.
- Pierce, U. S. B. 100, 68, 1912.
- Cheese mite, see Tyroglyphus**
- Cheese skipper, see Piophilidae casei**
- Cheiloneurus albicornis**
Johnson, Colo. B. 116, 11, 1906.
- Cheiloneurus diaspidinarum**
Quaintance & Sasscer, U. S. C. 121, 6, 1910.
- Chelinidea tabulata**
Hunter, Pratt & Mitchell, U. S. B. 113, 19, 1912.
- Chelinidea vittigera**
Hunter, Pratt & Mitchell, U. S. B. 113, 15, 1912.
- U. S. Y. B., 1908, 567.
- Chelonius blackburni**
Morgan & Crumb, U. S. D. A. B. 59, 7, 1914.
- Chelonius iridescens**
Titus, U. S. B. 54, 39, 1905.
- Chelonius laticinctus**
Hunter, Pratt & Mitchell, U. S. B. 113, 28, 1912.
- Chelonius sp.**
Patch, Me. B. 162, 365, 1908.
- Chelonius texanus**
Pierce & Holloway, J. Ec. Ent. V, 425, 1912.
- Sanderson, U. S. B. 57, 36, 1906.
- Chelymophra argus**
Forbes, Ill. Ent. R. 23, 192, 1905.

- Sanderson, Ins. Pests, 436, 1912.
 Symons, Md. B. 101, 179, 1905.
 ——— U. S. Y. B., 1908, 579.
- Chermes abieticola**
 Patch, Me. B. 173, 277, 1909.
- Chermes abieticolens**
 Patch, Me. B. 202, 160, 1913.
- Chermes abietis**
 Bethune, Ont. Agr. Coll. R. 32, 45, 1907.
 Bethune, Ont. Ent. Soc. R. 39, 135, '09.
 Britton, Conn. R. 6, 302, 1907.
 Caesar, Ont. Agr. Coll. B. 198, 25, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 189, 1905.
 Felt, J. Ec. Ent. II, 307, 1909.
 Felt, N. Y. R. 24, 54, 1909.
 Felt, N. Y. R. 25, 83, 1910.
 Fletcher, Ont. Ent. Soc. R. 36, 89, 1906.
 Fernald, Mass. B. 125, 56, 1908.
 Jarvis, Can. Hort. XXVIII, 422, 1905.
 Jarvis, Ont. Ent. Soc. R. 37, 55, 1907.
 Lochhead, Ont. Ent. Soc. R. 36, 138, '06.
 Patch, Me. B. 171, 203, 1909.
 Patch, Me. B. 173, 290, 1909.
 Patch, Me. B. 202, 160, 1913.
 Stene, R. I. Bd. Agr. R. 23, 43, 1908.
 Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
 Walker, Ent. Soc. Ont. R. 42, 61, 1912.
 Weiss & Patterson, N. J. C. 15, 14, '12.
 ——— C. Gentl., 1909, 500.
- Chermes consolidatus**
 Patch, Me. B. 173, 297, 1909.
 Patch, Me. B. 202, 161, 1913.
- Chermes cooley**
 Felt, N. Y. R. 26, 36, 1911.
 Patch, Me. B. 187, 23, 1911.
- Chermes floccus**
 Patch, Me. B. 173, 299, 1909.
 Patch, Me. B. 202, 161, 1913.
 ——— C. Gentl., May 25, 1911, 502.
- Chermes lariciatus**
 Patch, Me. B. 173, 294, 1909.
 Patch, Me. B. 202, 160, 1913.
- Chermes piceae**
 Felt, J. Ec. Ent. III, 342, 1910.
 Felt, N. Y. R. 26, 65, 1911.
- Chermes pinicorticis**
 Britton, Conn. R. 11, 343, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 192, '05.
 Felt, J. Ec. Ent. II, 307, 1909.
 Felt, N. Y. R. 25, 80, 1910.
 Felt, N. Y. R. 28, 103, 1913.
 Gibson, Ont. Ent. Soc. R. 41, 15, 1911.
- Hawes, Vt. B. 156, 134, 1911.
 Houser, Ohio B. 194, 181, 1908.
 Patch, Me. B. 109, 179, 1905.
 Patch, Me. B. 173, 303, 1909.
 Patch, Me. B. 202, 160, 1913.
 Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
 Walker, Ent. Soc. Ont. R. 42, 59, 1912.
 Washburn, Minn. R. 12, 100, 1908.
 Weiss & Patterson, N. J. C. 15, 16, '12.
 ——— U. S. Y. B., 1908, 575.
- Chermes pinifoliae**
 Britton, Conn. R. 11, 343, 1912.
 Patch, Me. B. 171, 1909.
 Patch, Me. B. 173, 277, 1909.
 Patch, Me. B. 202, 160, 1913.
- Chermes similis**
 Caesar, Ont. Ent. Soc. R. 42, 34, 1912.
 Caesar, Ont. Ent. Soc. R. 44, 53, 1914.
 Patch, Me. B. 173, 301, 1909.
 Patch, Me. B. 202, 161, 1913.
 Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
 Walker, Ont. Ent. Soc. R. 42, 60, 1912.
- Chermes sp.**
 Jarvis, Can. Hort. XXVIII, 303, 1905.
 Smith, N. J. R., 1910, 349.
- Chermes strobilobius**
 Felt, N. Y. St. Mus. Mem. 8, 187, 1905.
 Felt, J. Ec. Ent. II, 307, 1909.
 Felt, N. Y. R. 25, 80, 1910.
 Gibson, Ont. Ent. Soc. R. 41, 14, 1911.
 Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
- Cherry aphid**, *see* *Myzus cerasi*
Cherry fruit-fly, *see* *Rhagoletis cingulata*
Cherry fruit-maggot, *see* *Rhagoletis cingulata*
Cherry fruit-sawfly, *see* *Hoplocampa cookei*
Cherry insects
 Surface, Pa. D. A. Zool. II, 6, 233, 1912.
Cherry leaf-beetle, *see* *Galerucella cavicolis*
Cherry-leaf webworm, *see* *Calocalpe undulata*
Cherry scale, *see* *Aspidiotus forbesi*
Cherry slug, *see* *Caliroa cerasi*
Chestnut blight insect
 Ruggles, Science, Dec. 12, 1913, 852.
Chestnut borer (two-striped) *see* *Agrilus bilineatus*
Chestnut callidium, *see* *Callidium aereum*
Chestnut insects
 Surface, Pa. D. A. Zool. II, 6, 235, 1912.

- Chestnut timber worm, *see* *Lymexylon sericeum*
- Chestnut weevil, *see* *Balaninus rectus*
- Cheyletus semivivorus
Ewing, J. Ec. Ent. V, 416, 1912.
- Chicken-louse powders
——— U. S. D. A. Ins. & Fung. Bd. Ins.
1, p. 2-5, 1914.
——— U. S. D. A. Ins. & Fung. Bd. Ins.
3, p. 32-3, 1914.
- Chicken mite, *see* *Dermanyssus gallinae*
- Chickweed geometer, *see* *Haematopsis grataria*
- Chigger, *see* *Trombidium*
- Chigoe, *see* *Sarcopsylla penetrans*
- Chilocorus bivulnerus**
Bentley, Tenn. B. v. XIX, 2, 21, 1906.
Bentley, Tenn. Bd. Ent. B. 8, 9, 1913.
Bentley, Tenn. B. 98, 45, 1913.
Britton, Conn. B. 165, 15, 1909.
Britton, Conn. B. 181, 10, 1914.
Burgess & Collins, U. S. Y. B., 1911, 458.
Caesar, Ont. Agr. Coll. B. 219, 17, 1914.
Cordley, Oreg. B. 88, 11, 1906.
Cotton, Ohio Nurs. Orch. Insp. B. 7, 33, 1906.
Douglass, Ind. Ent. R. 1, 65, 1908.
Essig, Cal. Hort. B. II, 1-2, 211, 1913.
Essig, Cal. Hort. B. III, 3, 130, 1914.
Forbes, Ill. B. 112, 358, 1907.
Girault, J. Ec. Ent. I, 300, 1908.
Gossard, Fla. B. 79, 314, 1905.
Hayhurst, Ark. B. 107, 376, 1911.
Howard, U. S. R. Ent., 1905, 283.
Isaac, Bug vs. Bug, 14, 1906.
Johnson, Colo. B. 116, 10, 1906.
Marlatt, U. S. B. 62, 62, 1906.
Morrill & Back, U. S. B. 102, 9, 1912.
Nicholson, Okla. B. 79, 85, 1908.
Quaintance, U. S. C. 124, 9, 1910.
Quaintance & Sasseer, U. S. C. 121, 9, 1910.
Sanders, U. S. C. 64, 3, 1905.
Sherman, N. C. Dept. Agr. B. 28, 5, 1907.
Smith, N. J. R., 1904, 558, 570.
Smith, U. S. B. 52, 75, 1905.
Smith, Nebr. Hort. Soc. B. 20, 8, 1908.
Symons, Md. B. 101, 197, 1905.
Taylor, Colo. B. 120, 10, 1907.
Taylor, U. S. B. 67, 90, 1907.
Turner, Ala. Poly. C. 28, 108, 1914.
- Chilocorus orbis**
Davidson, U. S. D. A. B. 100, 38, 1914.
Parker, U. S. B. 111, 22, 1913.
- Chilocorus rufitarsus**
Cal. Fr. Grow., Feb. 25, 1905, 7.
- Chilocorus similis**
Burgess, U. S. B. 52, 52, 1905.
Burgess, & Collins, U. S. Y. B., 1911, 462.
Cordley, Oreg. B. 88, 10, 1906.
Felt, N. Y. R. 20, 411, 1905.
Felt, U. S. B. 52, 52, 1905.
Fernald, Mass. B. 116, 3, 1907.
Howard, Rur. N. Y., 1905, 845.
Howard, U. S. R. Ent., 1905, 283.
Howard & Fiske, U. S. B. 91, 37, 1911.
Marlatt, U. S. B. 62, 65, 1906.
Nakayama, Cal. Hort. B. I, 13, 932, '12.
Newell & Smith, U. S. B. 52, 69, 1905.
Quaintance, U. S. C. 124, 9, 1910.
Smith, N. J. R. f. 1904, 558, 574, 1905.
Smith, N. J. R., 1905, 541.
Smith, U. S. B. 52, 76, 1905.
Smith, U. S. B. 67, 37, 1907.
Smith, N. J. Bd. Agr. R. 37, 190, 1910.
Symons, Md. B. 101, 197, 1905.
Worsham, Ga. Bd. Ent. B. 30, 106, '09.
Worsham & Chase, Ga. Bd. Ent. B. 31, 6, 1910.
- Chilosia alaskensis**
Burke, Pr. Ent. Soc. Wash. VII, 89, '05.
Burke, U. S. C. 61, 2, 10, 1905.
- Chilosia hoodianus**
Burke, Pr. Ent. Soc. Wash. VII, 89, '05.
——— U. S. Y. B., 1908, 574.
- Chinese Mantid, see** *Tenodera sinensis*
- Chin fly, see** *Gastrophilus nasalis*
- Chinch bug, see** *Blissus leucopterus*
- Chion cinctus**
Felt, N. Y. St. Mus. Mem. 8, 267, 1905.
- Chionaspis americana**
Britton, Conn. B. 151, 10, 1905.
Britton, Conn. R. 5, 239, 1906.
Brues, Wis. R. 22, 326, 1905.
Davis, J. Ec. Ent. III, 186, 1910.
Douglass, Ind. Ent. R. 2, 114, 1910.
Douglass, Ind. Ent. R. 4, 185, 1912.
Felt, N. Y. St. Mus. Mem. 8, 207, 1905.
Felt, N. Y. R. 26, 55, 1911.
Girault, Ent. News, 1909, 355.
Houser, Ohio B. 194, 177, 1908.
Popenoe, Kans. Farm., Apr. 11, '07, 476.

- Smith, Nebr. Hort. Soc. B. 20, 9, 1908.
 Swenk, Nebr. Hort. Soc., 1909, 103.
- Chionaspis citri**
 Berger, Fla. R., 1907, xxxvii.
 Essig, Cal. Hort. B. II, 1-2, 120, 1913.
- Chionaspis corni**
 Britton, Conn. R. 5, 240, 1906.
 Douglass, Ind. Ent. R. 4, 187, 1912.
- Chionaspis euonymi**
 Britton, Conn. B. 151, 10, 1905.
 Britton, Conn. R. 5, 249, 1906.
 Essig, Cal. Hort. B. II, 1-2, 121, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 213, 1905.
 Gahan, Md. B. 119, 10, 1907.
 Metcalf, J. Ec. Ent. IV, 259, 1911.
 Sanders, U. S. C. 114, 1, 1909.
 Worsham, J. Ec. Ent. II, 207, 1909.
 ——— C. Gentl., 1908, 961.
- Chionaspis furfura**
 Alderman, Giddings & Rumsey, W. Va. C. 7, 31, 1913.
 Baldwin, Ind. Ent. R. 5, 74, 1912.
 Beach, Iowa B. 127, 59, 1912.
 Bentley, Tenn. B. XIX, No. 2, 33, '06.
 Bethune, Ont. Agr. Coll. B. 158, 15, '07.
 Britton, Conn. B. 151, 11, 1905.
 Britton, Conn. R. 5, 240, 1906.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 38, 1913.
 Douglass, Ind. Ent. R. 1, 74, 1908.
 Douglass, Ind. Ent. R. 2, 111, 1910.
 Douglass, Ind. Ent. R. 3, 105, 1910.
 Douglass, Ind. Ent. R. 4, 188, 1912.
 Ehrhorn, Cal. Fr. Grow., Dec. 12, 1908, 11.
 Ehrhorn, Pac. Rur. Press, LXXVI, 372, 1908.
 Essig, Cal. Hort. B. II, 1-2, 122, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 214, 1905.
 Felt, N. Y. R. 21, 92, 1906.
 Felt, Gard. Mag., Jan. 1906, 270.
 Felt, N. Y. Fr. Grow. Assoc., '06, 122.
 Felt, N. Y. Fr. Grow. Assoc., 1907, 27.
 Felt, U. S. B. 60, 89, 1906.
 Felt, C. Gentl., 1907, 552.
 Felt, N. Y. R. 22, 48, 1907.
 Felt, U. S. B. 67, 39, 1907.
 Felt, Mass. Fr. Grow. Assoc. R. 12-16, 10, 1910.
 Fernald, Mass. Bd. Agr. C. 6, 10, 1913.
 Forbes, Ill. B. 151, 517, 1911.
 Forbes, Ill. Ent. R. 26, 55, 1911.
- Fulton, Wright & Gregg, Pa. B. 110, 17, 1911.
 Funk, Pa. Dept. Agr. B. 152, 212, 1907.
 Garman, Ky. B. 133, 55, 1908.
 Gillette, Colo. B. 114, 14, 1906.
 Gossard, Ohio B. 164, 13, 25, 1905.
 Gossard, Ohio B. 198, 51, 1908.
 Gossard, Ohio B. 233, 108, 1911.
 Haseman, Mo. Hort. Soc., 1911, 228.
 Houghton, Del. C. 3, 3, 1907.
 Houser, Ohio B. 194, 176, 1908.
 Houser, Ohio C. 143, 54, 1914.
 Jarvis, Can. Ent., 1906, 291.
 Jarvis, Ont. Ent. Soc. R. 37, 114, '07.
 Jarvis, Ont. Ent. Soc. R. 38, 69, 1908.
 Jarvis, Conn. Storrs B. 56, 241, 1909.
 Johannsen, Me. B. 207, 439, 1912.
 Lamson, Conn. Storrs B. 71, 65, 1912.
 Lochhead, Syn. Ec. Ent. 42, 1914.
 Moore, Wis. B. 190, 10, 1910.
 O'Kane, Inj. Ins. 259, 1914.
 Quaintance & Sasser, U. S. C. 121, 6, 1910.
 Ruggles & Stakman, Minn. B. 121, 13, 1911.
 Rumsey, W. Va. Hort. Soc. 14th Ann. R. 32, 1907.
 Rumsey & Brooks, W. Va. B. 116, 242, 1908.
 Rumsey, & Brooks, W. Va. R. f. 1905-1906, 25.
 Rumsey & Brooks, W. Va. R. f. 1907-1908, 22.
 Sanders, Wis. B. 227, 17, 1912.
 Sanderson, N. H. R. 17-18, 342, 1906.
 Sanderson, Ins. Pests, 595, 1912.
 Slingerland & Crosby, N. Y. C. B. 252, 340, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 176, 1914.
 Slingerland, Herrick & Crosby, N. Y. C. B. 382, 469, 1910.
 Smith, N. J. B. 181, 19, 1905.
 Smith, Nebr. Hort. Soc. B. 20, 8, 1908.
 Smith, N. C. B. 206, 64, 1910.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 18.
 Stene, R. I. Bd. Agr. R. 21, 44, 46, 1906.
 Stene, R. I. Nurs. Insp. 28, 1906.
 Surface, Pa. D. A. Zoöl. III, 2, 48, 1905.
 Surface, Pa. Dept. Agr. R. 16, 116, 1910.

- Surface, Pa. Dept. Agr. Zoöl. I, 1, 16, 1911.
 Surface, Pa. Dept. Agr. Zoöl. III, 1, 12, 1913.
 Symons, Md. B. 101, 135, 1905.
 Taylor, Mo. Fr. Exp. Sta. B. 18, 81, '08.
 Troop, Ind. B. 102, 253, 1905.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 478, 1911.
 Washburn, Minn. R. 12, 111, 1908.
 Washburn, Minn. Ent. R. 13, 99, 1910.
 Weiss & Patterson, N. J. C. 15, 24, 1912.
 Whiteside, Mont. Bd. Hort. f. 1905-1906, 34, 1907.
 Whiteside, Mont. Bd. Hort. f. 1907-1908, 30, 1909.
 Worsham, J. Ec. Ent., II, 206, 1909.
 ——— C. Gentl., 1907, 421, 658.
 ——— C. Gentl., 1908, 488.
 ——— Farm. Guide, Feb. 13, 1909, 18.
 ——— U. S. Y. B., 1906, 513.
 ——— U. S. Y. B., 1907, 548.
- Chionaspis lintneri**
 Felt, N. Y. St. Mus. Mem. 8, 227, 1905.
 Johannsen, Me. B. 187, 10, 1911.
 Johannsen, Me. B. 207, 440, 1912.
- Chionaspis ortholobis**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 195, 1907.
 Smith, Nebr. Hort. Soc. B. 20, 12, 1908.
- Chionaspis pinifoliae**
 Britton, Conn. R. 7, 334, 1908.
 Britton, Conn. B. 151, 11, 1905.
 Britton, Conn. R. 5, 240, 1906.
 Britton, Conn. R. 7, 332, 1908.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 196, 1907.
 Douglass, Ind. Ent. R. 1, 75, 1908.
 Douglass, Ind. Ent. R. 2, 114, 1910.
 Douglass, Ind. Ent. R. 4, 190, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 229, 1905.
 Houser, Ohio B. 194, 180, 1908.
 Jarvis, Ont. Ent. Soc. R. 38, 71, 1908.
 Lee, Farm. Advocate, Can., 1910, 869.
 Smith, Nebr. Hort. Soc. B. 20, 10, 1908.
 Stene, R. I. Nurs. Insp. R. 1906, 30.
 Swenk, Nebr. Hort. Soc., 1909, 92.
 Webster, J. Ec. Ent. II, 211, 1909.
 Weiss, N. J. R., 1912, 437.
 Weiss & Patterson, N. J. C. 15, 19, 1912.
 Wilson, Pr. Ent. Soc. B. C., 2, 7, 1912.
- Chionaspis quercus**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 197, 1907.
- Chionaspis salicis**
 Douglass, Ind. Ent. R. 2, 113, 1910.
- Chionaspis salicis-nigrae**
 Douglass, Ind. Ent. R. 4, 193, 1912.
 Cooley, Mont. B. 64, 44, 1906.
- Chionaspis sp.**
 Surface, Pa. D. A. Zoöl. V, 12, 370, 1908.
- Chionaspis wistariae**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 197, 1907.
- Chironomus sp.**
 Felt, N. Y. R. 27, 122, 1912.
- Chiropachys colon**
 Caesar, Ont. Ent. Soc. R. 40, 18, 1910.
 Gossard, Ohio B. 264, 30, 1913.
 Sanderson, Ins. Pests, 545, 1912.
- Chirothrips crassus**
 Hooker, U. S. B. 65, 12, 1907.
- Chlaenius tomentosus**
 Runner, U. S. D. A. B. 78, 13, 1914.
- Chlamys plicata**
 Troop, Or. Judd Farm., Aug. 31, '07, 168.
- Chloridea obsoleta**, *see* **Heliothis**
- Chloridea virescens**
 Barre & Conradi, S. C. B. 141, 50, 1909.
 Britton, Conn. R. 9, 368, 1910.
 Hooker, U. S. B. 67, 106, 1907.
 Jenkins, Conn. B. 180, 46, 1914.
 Metcalf, N. C. Dept. Agr. Sp. B. 36, '09.
 Morgan, U. S. Y. B., 1910, 288.
 O'Kane, Inj. Ins. 213, 1914.
 Sanderson, Ins. Pests, 234, 1912.
 ——— U. S. Y. B., 1906, 509.
 ——— U. S. Y. B., 1907, 542.
 ——— U. S. Y. B., 1908, 568.
- Chlorinated lime**
 ——— U. S. D. A. Ins. & Fung. Bd. Ins. 2, p. 25, 1914.
- Chlorine**
 Britton, Conn. R. 7, 277, 1908.
 Britton, J. Ec. Ent. I, 112, 1908.
- Chloro-Naphtholeum Dip**
 ——— U. S. D. A. Ins. & Fung. No. 135, 1913.
- Chloro-Naphtholeum Disinfectant**
 ——— U. S. D. A. Ins. & Fung. Bd. Ins. 3, p. 41, 1914.
 ——— U. S. D. A. Ins. & Fung. Bd. Ins. 6, p. 85, 1914.

- Chlorochara conica**
Forbes, Ill. Ent. R. 23, 203, 1905.
Gossard, J. Ec. Ent. IV, 209, 1911.
- Cholomyia inaequipes**
Quaintance & Jenne, U. S. B. 103, 150, 1912.
- Chorioptes bovis**
Law, U. S. B. An. I, Horse Book, 452, 1907.
- Chorizagrotis agrestis**
Cooley, Mont. R. 12, 268, 1906.
Essig, Cal. Hort. B. II, 1-2, 163, 1913.
Gibson, Can. Exp. Farms Ent. B. 3, 25, 1912.
Johnson, Colo. B. 98, 17, 1905.
Morrill, Ariz. Comm. Agr. & Hort. R. 6, 32, 1914.
Sanborn, Okla. B. 100, 16, 1912.
Swenk, Nebr. Ent. B. 1, 26, 1913.
- Chorizagrotis auxiliaris**
Cooley, Mont. B. 71, 137, 1908.
Gibson, Can. Exp. Farms Ent. B. 3, 25, 1912.
Gregson, U. S. B. 67, 125, 1907.
Swenk, Nebr. Ent. B. 1, 26, 1913.
——— U. S. Y. B., 1907, 543.
- Chorizagrotis introferens**
Gibson, Can. Exp. Farms Ent. B. 3, 25, 1912.
Johnson, Colo. B. 98, 17, 1905.
Swenk, Nebr. Bd. Agr. R. f., 1910, 363.
Swenk, Nebr. Ent. B. 1, 26, 1913.
- Chorizagrotis soror**
Hunter, Pratt & Mitchell, U. S. B. 113, 15, 1912.
- Chorizagrotis sp.**
Ball, Deseret Farm, May 6, 1911, 15.
- Chortophaga viridifasciata**
Morgan, U. S. Y. B., 1910, 292.
- Chramesus hicoriae**
Felt, N. Y. St. Mus. Mem. 8, 448, 1906.
- Chromaphis juglandicola**
Davidson, U. S. D. A. B. 100, 1, 1914.
Essig, Pom. Jr. Ent. I, 51, 1909.
Essig, Ventura Co. (Cal.) Hort. Comm. B. 2, 1911.
Essig, Cal. Hort. B. I, 5, 190, 1912.
Essig, Cal. Hort. B. II, 1-2, 81, 1913.
Gillette, J. Ec. Ent. III, 367, 1910.
Weldon, Cal. Hort. B. III, 5, 221, 1914.
Wilson, Oreg. Bien. Crop Pest R. f., 1911-1912, 165.
- Pac. Rur. Press LXXXVI, 52, 1913.
- Chrysanthemum leaf-miner**, *see* *Phytomyza chrysanthemi*
- Chrysobothris azurea**
Felt, N. Y. St. Mus. Mem. 8, 467, 1906.
- Chrysobothris dentipes**
Felt, N. Y. St. Mus. Mem. 8, 657, 1906.
- Chrysobothris femorata**
Adams, Ark. B. 92, 7, 1907.
Alderman, Giddings & Rumsey, W. Va. C. 7, 26, 1913.
Baldwin, Ind. Ent. R. 5, 59, 1912.
Beach, Iowa B. 127, 53, 1912.
Bethune, Ont. Agr. Coll. B. 158, 17, '07.
Bremner, Cal. Hort. Comm. Destr. Ins. 13, 1910.
Britton, Conn. R. 13, 250, 1914.
Buckley, Me. Dept. Agr. B. vol. X, 3, 5, 1911.
Chandler, Mo. Hort. Soc., 1909, 355.
Chandler, Mo. B. 102, 250, 1912.
Chase, Ga. Bd. Ent. B. 38, 30, 1913.
Chittenden, Nut Grow., Feb. 1906, 120.
Chittenden, U. S. C. 32, 3rd Ed., 8, '07.
Cook, Cal. Hort. B. I, 5, 195, 1912.
Cooper, Cal. Hort. Comm. Ins. & Insect., 1905, 15.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 33, 1913.
Douglass, Ind. Ent. R. 2, 78, 1910.
Douglass, Ind. Ent. R. 3, 100, 1910.
Douglass, Ind. Ent. R. 4, 111, 1912.
Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 226, 1907.
Essig, Cal. Hort. B. II, 1-2, 235, 1913.
Felt, N. Y. St. Mus. Mem. 8, 86, 1905.
Fulton, Wright & Gregg, Pa. B. 110, 12, 1911.
Funk, Pa. Dept. Agr. B. 152, 210, 1907.
Garcia, N. Mex. B. 68, 48, 1908.
Gardner, Me. Comm. Agr. R. f. '11, 51.
Garman, Ky. B. 133, 48, 1908.
Gillette, Colo. B. 114, 13, 1906.
Gillette, Better Fr., Feb. 1910, 17.
Gossard, Ohio B. 164, 18, 1905.
Gossard, Ohio B. 198, 51, 1908.
Gossard, Ohio B. 233, 99, 1911.
Haseman, Mo. Hort. Soc., 1911, 222.
Hewitt & Hayhurst, Ark. B. 109, 442, '11.
Hitchings, Me. Comm. Agr. R., 1907, 301, 1908.

- Hitchings, Me. Ent. R. 3, 97, 1908.
 Hitchings, Me. Ent. R. 5, 9, 1910.
 Jarvis, Conn. Storrs B. 56, 242, 1909.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 326.
 Lambert, Col. Rur. World, May 1, 1907, 139.
 Lamson, Conn. Storrs B. 71, 62, 1912.
 Lewis, Ga. Bd. Ent. B. 30, 21, 1909.
 Lochhead, Ont. Agr. Coll. B. 144, 29, '05.
 Lochhead, Syn. Ec. Ent. 72, 1914.
 Morris, Kans. Farm., May 25, 1905, 563.
 Munson, Me. Dept. Agr. Quart. B. vol. IV, 1, 13, 1905.
 O'Kane, Inj. Ins. 237, 1914.
 Parry, Utah Bd. Hort. Bien. R. f. 1903-1904, 72, 1905.
 Patton, Nat'l Fr. Grow., Jan. 1908, 15.
 Rumsey & Brooks, W. Va. R. f. 1907-1908, 16.
 Rumsey & Brooks, W. Va. B. 116, 232, 1908.
 Sanders, Wis. B. 227, 20, 1912.
 Sanderson, Ins. Pests, 591, 1912.
 Severin, S. D. Hort. Soc. 7th R. 239, '10.
 Slingerland & Crosby, Man. Fr. Ins. 194, 1914.
 Smith, U. S. B. 67, 104, 1907.
 Smith, N. C. B. 206, 54, 1910.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 8.
 Stene, R. I. Bd. Agr. R. 21, 36, 1906.
 Stene, R. I. Nurs. Insp. 20, 1906.
 Surface, Pa. Dept. Agr. R. 13, 503, '07.
 Swaine, Ont. Ent. Soc. R. 41, 92, 1911.
 Swenk, Nebr. Farm., July 1, 1914, p. 680.
 Symons, Md. B. 101, 129, 1905.
 Washburn, Minn. B. 14, 58, 1912.
 Wilson, Oreg. Cir. B. 15.
 Wilson, Better Fr. Feb. 1912, 77.
 Worsham, Ga. Bd. Ent. B. 33, 120, '10.
 ——— Cal. Cult. XXVI, 438, 1906.
 ——— Farm. World. Can., 1907, 502.
 ——— Pac. Rur. Press, LXXIII, 131, 1907.
 ——— Pac. Rur. Press, LXXIV, 67, 1907.
- Chrysobothris floricola**
 Felt, N. Y. St. Mus. Mem. 8, 658, 1906.
- Chrysobothris pusilla**
 Felt, N. Y. St. Mus. Mem. 8, 658, 1906.
- Chrysocharis ainsliei**
 Phillips, J. Agr. Res. II, 28, 1914.
 Webster & Parks, J. Agr. Res. I, 79, '13.
- Chrysocharis parksi**
 Phillips, J. Agr. Res. II, 28, 1914.
 Webster & Parks, J. Agr. Res. I, 79, '13.
- Chrysochus auratus**
 Newell & Smith, U. S. B. 52, 70, 1905.
 ——— C. Gentl., 1910, 762.
- Chrysomela bigsbyana**
 Felt, N. Y. St. Mus. Mem. 8, 566, 1906.
- Chrysomela scalaris**
 Felt, N. Y. St. Mus. Mem. 8, 542, 1906.
- Chrysomphalus aonidium**
 Britton, Conn. B. 151, 14, 1905.
 Britton, Conn. R. 5, 243, 1906.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 213, 1907.
 Davis, Ill. Ent. R. 27, 128, 1912.
 Douglass, Ind. Ent. R. 4, 213, 1912.
 Essig, Cal. Hort. B. II, 1-2, 131, 1913.
 Gahan, Md. B. 119, 7, 1907.
 Lewis, Ga. Bd. Ent. B. 33, 90, 1910.
 Lewis, Ga. Hort. Soc., 1910, 90.
 Morrill, U. S. B. 76, 61, 1908.
 Yothers, U. S. C. 168, 8, 1913.
 ——— U. S. Y. B., 1908, 577.
- Chrysomphalus aonidium, fungus of**
 Watson, Fla. Grow., Nov. 15, 1913, 21.
- Chrysomphalus aurantii**
 Britton, Conn. R. 5, 244, 1906.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 214, 1907.
 Coit, Ariz. B. 58, 317, 1908.
 Cook, Cal. Cult., XXXII, 499, 1909.
 Cook, Pom. Jr. Ent. I, 15, 1909.
 Cundiff, Claremont (Cal.) Pom. Club B. 2, 11, 1909.
 Day, Cal. Cult., XXV, 271, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 112, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 224, 1907.
 Essig, Cal. Hort. B. II, 1-2, 132, 1913.
 Jeffrey, Cal. Hort. Comm. Bien. R. 2, 284, 1907.
 Mills, Cal. Cult. XXVII, 605, 1906.
 Morrill, J. Ec. Ent. VI, 191, 1913.
 Morrison, Ind. Ent. R. 6, 76, 1914.
 Quayle, J. Ec. Ent. IV, 301, 511, 1911.
 Quayle, Cal. B. 214, 459, 1911.
 Quayle, Cal. B. 222, 99, 1911.

- Woglum, U. S. B. 79, 13, 1909.
 Woglum, U. S. B. 90, 9, 1912.
 ——— Pac. Rur. Press, LXIX, 115, '05.
 ——— Rur. Calif., July 1905, 265.
 ——— S. W. Stockm., Mar. 5, 1909, 3.
 ——— U. S. Y. B., 1906, 513.
- Chrysomphalus aurantii, quarantine**
 Cook, Cal. Hort. Comm. Statutes, 1912, 25.
 ——— Cal. Hort. B. I, 13, 953, 1912.
- Chrysomphalus critinus**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 216, 1907.
 Coit, Ariz., B. 58, 318, 1908.
 Cook, Pom. Jr. Ent. I, 19, 1909.
 Essig, Pom. Jr. Ent. I, 11, 1909.
 Essig, Cal. Hort. B. II, 1-2, 134, 1913.
 Pease, Cal. Hort. Comm. C. Nov. '05, 9.
 Pease, Cal. Cult. XXX, 571, 1908.
 Quayle, J. Ec. Ent. IV, 511, 1911.
 Quayle, Cal. B. 222, 141, 1911.
 Quayle, Cal. B. 214, 465, 1911.
 Woglum, U. S. B. 90, 10, 1912.
 Woglum, U. S. B. 79, 13, 1909.
 ——— Pac. Rur. Press LXXXVII, 235, 1914.
- Chrysomphalus dictyospermi**
 Britton, Conn. B. 151, 15, 1905.
 Britton, Conn. R. 5, 244, 1906.
 Douglass, Ind. Ent. R. 4, 219, 1912.
 Fernald, Mass. Crop R. f. Oct. '07, 32.
 Fernald, Mass. Bd. Agr. R. 55, 388, '08.
 Quayle, U. S. D. A. B. 134, 15, 1914.
- Chrysomphalus ficus, see C. aonidium**
- Chrysomphalus obscurus**
 Herrick & Harned, J. Ec. Ent. II, 295, 1909.
 Morrison, Ind. Ent. R. 6, 77, 1914.
 Newell, La. Crop Pest Comm. C. 4, 14, 1905.
 Rosenfeld, J. Ec. Ent. III, 216, 1910.
 Smith, Ga. Bd. Ent. B. 20, 166, 1906.
 Smith & Lewis, U. S. B. 60, 78, 1906.
 Worsham, J. Ec. Ent. II, 207, 1909.
- Chrysomphalus rossi**
 Essig, Cal. Hort. B. II, 1-2, 136, 1913.
- Chrysomphalus tenebriosus**
 Conradi, S. C. R. 24, 57, 1911.
 Hayhurst, Ark. B. 107, 373, 1911.
 Metcalf, J. Ec. Ent. IV, 515, 1911.
 Newell, La. Crop Pest Comm. C. 4, 14, 1905.
- Phillips, J. Ec. Ent. I, 156, 1908.
 Phillips, Va. Hort. Soc. 13th R. 212, '09.
 Sherman, J. Ec. Ent. II, 204, 1909.
 Weldon, Md. Hort. Soc., 1907, 59, 1908.
 Weldon, J. Ec. Ent. I, 146, 1908.
 ——— U. S. Y. B., 1907, 550.
- Chrysomyia macellaria**
 Bishopp, U. S. Y. B., 1912, 392.
 Bishopp, Tex. Stockm. Farm., Feb. 11, 1914, 12.
 Blain, Detroit Med. Jr. IX, 253, 1909.
 Dalrymple, Amer. Vet. Rev. XXX, 1351, 1907.
 Davies, Jr. Amer. Med. Assoc. LIV, 50, 1910.
 Doane, Ins. & Disease, 47, 1910.
 Edgar, Tex. St. Jr. Med. IX, 21, 1913.
 Herms, Cal. Cult. XXXIV, 131, 1910.
 Herms, Cal. Cult. XLI, 263, 1913.
 Herrick, Household Ins. 424, 1914.
 Hutchins, Jr. Cutan. Dis., June, '06, 270.
 Mayer, U. S. F. B. 261, 18, 1906.
 Nason, Jr. Kans. Med. Soc. VIII, 501, 1908.
 O'Kane, Inj. Ins. 374, 1914.
 Ransom, U. S. B. An. I, R., 1908, 498.
 Washburn, Minn. R. 10, 153, 1905.
 Washburn, Minn. B. 22, 15, 1905.
 Yount, Jr. Amer. Med. Assoc. XLIX, 1913, 1907.
 Yount & Sudler, Jr. Amer. Med. Assoc. XLIX, 1912, 1907.
 ——— U. S. Y. B., 1906, 516.
 ——— U. S. Y. B., 1907, 552.
 ——— U. S. Y. B., 1908, 580.
- Chrysopa californica**
 Davidson, U. S. D. A. B. 100, 36, 1914.
 Essig, Pom. Jr. Ent. III, 604, 1911.
 Essig, Cal. Hort. B. I, 7, 282, 1912.
 Essig, Cal. Hort. B. II, 1-2, 153, 1913.
 Essig, Cal. Hort. B. III, 3, 134, 1914.
 Ewing, Oreg. B. 121, 57, 1914.
 Parker, U. S. B. 111, 22, 1913.
 Parker, U. S. B. 117, 19, 1913.
 Quayle, Cal. B. 234, 518, 1912.
 Russell, U. S. B. 118, 41, 1912.
- Chrysopa majescula**
 Davidson, U. S. D. A. B. 100, 36, 1914.
- Chrysopa nigricornis**
 Swenk, Nebr. R. 24, 41, 1911.
- Chrysopa oculata**
 Chittenden, U. S. C. 43, 2nd Ed., 5, '09.

- Folsom, Ill. B. 134, 149, 1909.
 Garman & Jewett, Ky. B. 187, 589, '14.
 Hammar, U. S. B. 80, 41, 1909.
 McGregor, J. Ec. Ent. VII, 330, 1914.
 Swenk, Nebr. R. 24, 41, 1911.
- Chrysopa plorabunda**
 Folsom, Ill. B. 134, 149, 1909.
 Sanborn, Okla. B. 98, 14, 1912.
 Webster & Phillips, U. S. B. 110, 132, 1912.
- Chrysopa quadripunctata**
 McGregor, U. S. C. 172, 16, 1913.
- Chrysopa rufilabris**
 Chittenden, U. S. C. 104, 6, 1909.
 Folsom, Ill. B. 134, 150, 1909.
- Chrysopa sp.**
 Douglass, Ind. Ent. R. 3, 216, 1910.
 Hammar, U. S. B. 115, 74, 1912.
 Herrick & Hungate, N. Y. C. B. 300, 737, 1911.
 Quayle, Cal. B. 198, 202, 1908.
 Sherman, N. C. Dept. Agr. B. v. 29, 6, 53, 1908.
 Smith, Nebr. Bd. Agr. R. f., 1908, 324.
 Smith, Nebr. Ins. Pest Bur. C. 1, 3, '08.
 Thompson, Nebr. Bd. Agr. R. f., 1909, 256.
 Webster, U. S. B. 69, 60, 1907.
- Chrysophanus thoe**
 Gibson, Ont. Ent. Soc. R. 36, 119, 1906.
- Chrysoplaticerus splendens**
 Essig, Pom. Jr. Ent. III, 521, 1911.
 Essig, Cal. Hort. B. II, 1-2, 271, 1913.
 Essig, Cal. Hort. B. III, 3, 126, 1914.
- Chrysops aestuans**
 Garman, Ky. B. 151, 191, 1910.
- Chrysops bistellatus**
 Hine, La. B. 93, 26, 1907.
- Chrysops brunneus**
 Hine, La. B. 92, 26, 1907.
- Chrysops callidus**
 Hine, La. B. 93, 28, 1907.
- Chrysops flavidus**
 Hine, La. Crop Pest Comm. C. 6, 34, 1906.
 Hine, La. B. 93, 10, 29, 1907.
- Chrysops fulvistigma**
 Hine, La. B. 93, 29, 1907.
- Chrysops lugens**
 Hine, La. B. 93, 30, 1907.
- Chrysops moechus**
 Hine, La. B. 93, 31, 1907.
- Chrysops moerens**
 Hine, Tech. B. 12, pt. 2, U. S. Bur. Ent. 36, 1906.
- Chrysops obsoletus**
 Garman, Ky. B. 151, 191, 1910.
 Hine, La. Crop Pest Comm. C. 6, 35, '06.
 Hine, La. B. 93, 32, 1907.
- Chrysops pikei**
 Hine, La. Crop Pest Comm. C. 6, 35, '06.
 Hine, La. B. 93, 33, 1907.
- Chrysops pudicus**
 Hine, La. B. 93, 33, 1907.
- Chrysops sequax**
 Hine, La. B. 93, 34, 1907.
- Chrysops univittatus**
 Garman, Ky. B. 151, 191, 1910.
 Hine, La. B. 93, 34, 1907.
- Chrysops vittatus**
 Garman, Ky. B. 151, 191, 1910.
 Hine, La. Crop Pest Comm. C. 6, 13, 36, 1906.
 Hine, La. B. 93, 35, 1907.
- **Cicada cinctifera**
 Morrill, Ariz. Comm. Agr. & Hort. R. 6, 31, 1914.
- **Cicada erratica**
 Newell, U. S. B. 60, 52, 1906.
- **Cicada linnei**
 Gossard, Ohio B. 233, 129, 1911.
- Cicada septendecim**, *see* **Tibicen**
- Cicada sp.**
 Morrill, S. W. Stockm., Dec. 5, 1913, 10.
- **Cicada tibicen**
 Felt, N. Y. St. Mus. Mem. 8, 237, 1905.
 Tucker, Kans. Farm., Sept. 14, 1905, 947.
- Cicada tredecim**, *see* **Tibicen**
- **Cicadula 6-notata**
 Osborn, U. S. B. 108, 97, 1912.
- Cicindela imperfecta**
 Webster, U. S. B. 112, 31, 1912.
- Cicindela repanda**
 Folsom, Ill. Ent. R. 25, 90, 1909.
- Cicindela 6-guttata**
 Burgess & Collins, U. S. Y. B., 1911, 454.
- Cidaria diversilineata**
 Bethune, Ont. Agr. Coll. B. 158, 31, '07.
- Cigar case-bearer**, *see* **Coleophora fletcherella**
- Cigarette beetle**, *see* **Lasioderma testaceum**
- Cimbex americana**
 Britton, Conn. R. 12, 294, 1913.

- Felt, N. Y. St. Mus. Mem. 8, 155, 1905.
 Washburn, Minn. R. 12, 117, 1908.
- Cimex columbarius**
 Felt, N. Y. St. Mus. B. 129, 21, 1909.
 Felt, N. Y. St. Mus. B. 136, 21, 1912.
 Girault, Ent. News, 1913, 341.
- Cimex hirundinis**
 Felt, N. Y. St. Mus. B. 129, 21, 1909.
 Felt, N. Y. St. Mus. B. 136, 21, 1912.
- Cimex lectularius**
 Bishopp, U. S. Y. B., 1912, 394.
 Dietz, Ind. Ent. R. 5, 183, 1912.
 Doten, Nev. B. 72, 33, 1909.
 Douglass, Ind. Ent. R. 1, 89, 1908.
 Felt, N. Y. St. Mus. B. 129, 20, 1909.
 Felt, N. Y. St. Mus. B. 136, 20, 1912.
 Fletcher, Nor'-West Farm., Sept. 20, 1905, 869.
 Girault, Psyche, 1905, 61, 117.
 Girault, Jr. Amer. Med. Assoc. XLVII, 85, 1906.
 Herrick, Household Ins. 108, 1914.
 Howard, U. S. B. 54, 86, 1905.
 Johnson, C. Gentl., 1909, 625.
 Johnson, Kans. Farm., May 1, '09, 16.
 Lochhead, Can. Ent., 1906, 66.
 Lochhead, Syn. Ec. Ent. 48, 1914.
 Marlatt, U. S. C. 47 Rev. Ed., 1, 1907.
 O'Kane, Inj. Ins. 354, 1914.
 Pettit, Col. Rur. World, June 29, 1910, 206.
 Phillips, U. S. B. 52, 95, 1906.
 Rosenau, Prevent. Med., 272, 1913.
 Rucker, Pub. Health R. XXVII, 1854, 1912.
 Slingerland, Rur. N. Y., 1907, 583.
 Smith, N. J. B. 203, 18, 1907.
 Stiles, Osler's Mod. Med. I, 635, 1907.
 Surface, Pa. D. A. Zoöl. V, 12, 386, '08.
 Surface, Pa. D. A. Zoöl. I, 1, 38, 1911.
 Surface, Pa. D. A. Zoöl. III, 1, 21, 1913.
 Swenk, Nebr. Bd. Agr. f. 1909, 262.
 Symons, Md. B. 101, 191, 1905.
 Washburn, Minn. R. 76, 1912.
 Whitmarsh, Ohio B. 253, 126, 1912.
 Zimmer, Nebr. Bd. Agr. R. f., '09, 262.
 ——— Deseret Farm., June 15, '05, 8.
 ——— Jr. Amer. Med. Assoc. XLVI, 804, 1906.
 ——— Rur. N. Y., 1910, 1052.
 ——— The Ranch, 'Dec. 15, 1913, 11.
- Cimex lectularius and leprosy**
 Howard & Clark, Jr. Exper. Med., Dec. 1912, 850.
- Cingilia catenaria**
 Hardenberg, Wis. B. 159, 17, 1908.
 Hardenberg & Malde, Wis. R. 24, 313, 1907.
 Hardenberg & Malde, Wis. Cranb. Grow. Assoc., 21st Meet., 13, 1908.
 O'Kane, Inj. Ins. 284, 1914.
 Patch, Me. B. 123, 215, 1905.
 Sanderson, N. H. R. 17-18, 352, 1906.
 Sanderson, U. S. B. 60, 74, 1906.
 ——— U. S. Y. B., 1905, 633.
- Cirrospilus flavicinctus**
 Quaintance, U. S. B. 68, 29, 1907.
- Cirrospilus flavoviridis**
 Phillips, J. Agr. Res. II, 28, 1914.
 Webster & Parks, J. Agr. Res. I, 81, '13.
- Citheronia regalis**
 Felt, N. Y. St. Mus. Mem. 8, 305, 1905.
 Sherman, N. C. Dept. Agr. B., 29, 6, 51, 1908.
- Citronella, oil of**
 Garman, Ky. B. 147, 18, 1910.
- Citrus insects**
 Adamson, Pac. Rur. Press LXXXVIII, 304, 1914.
 Cook, Cal. Cult., XXIV, 269, 1905.
 Quayle, Cal. B. 214, 1911.
 Stevens, Fla. Hort. Soc. Trans. f., 1913, 201.
 Woglum, U. S. B. 79, 1909.
 Yothers, Fla. Grow., Nov. 2, 1912, 3.
 ——— S. W. Stockm., Mar. 5, 1909, 3.
- Citrus mealy bug, see Pseudococcus citri**
- Citrus red spider, see Tetranychus mytilaspidis**
- Citrus rust mite, see Eriophyes oleivorus**
- Citrus thrips, see Euthrips citri**
- Citrus white-fly, see Aleurodes citri**
- Cladius pectinicornis**
 Chittenden, U. S. C. 105, 6, 1908.
 Cory, Md. Hort. Soc., 1912, 191, 1913.
 Gibson, Ont. Ent. Soc. R. 36, 111, 1906.
 ——— U. S. Y. B., 1905, 635.
 ——— U. S. Y. B., 1907, 551.
- Cladobius saliciti**
 Davidson, J. Ec. Ent. III, 375, 1910.
- Clastoptera obtusa**
 Felt, N. Y. St. Mus. Mem. 8, 687, 1906.

- Clastoptera pini**
Felt, N. Y. St. Mus. Mem. 8, 686, 1906.
- Clay-colored bill-bug, see** *Sphenophorus aequalis*
- Clear-winged locust, see** *Camnula pellucida*
- Cleonus canescens**
Gillette, Colo. R. 24, 31, 1911.
Gillette, J. Ec. Ent. V, 367, 1912.
- Cleonus quadrilineatus**
Chittenden, U. S. B. 64, 37, 1908.
Marsh, U. S. F. B. 380, 16, 1909.
- Cleonus sparsus**
Lovett, Oreg. Bien. Crop Pest R. f., 1913-1914, 154.
- Cleora pampinaria**
Chittenden, U. S. B. 66, 21, 1907.
O'Kane, Inj. Ins. 283, 1914.
Slingerland & Crosby, Man. Fr. Ins. 464, 1914.
- Clerus ichneumoneus**
Felt, N. Y. St. Mus. Mem. 8, 502, 1906.
- Clerus quadriguttatus**
Felt, N. Y. St. Mus. Mem. 8, 666, 1906.
- Climate and insects**
Morrill, Cal. Fr. Grow., Nov. 9, 1912, 4.
- Climatic immunity from insects**
Morrill, S. W. Stockm., Mar. 21, '13, 11.
- Climbing cutworms, see** *Xylina*
- Clinocoris lectularius, see** *Cimex*
- Clinopleura melanopleura**
Essig, Cal. Hort. B. II, 1-2, 23, 1913.
Hunter, Cal. B. 170, 4, 1905.
- Clisiocampa, see** *Malacosoma*
- Clivina impressifrons**
Howard, U. S. R. Ent., 1906, 21.
Howard, U. S. R. Ent., 1908, 24.
O'Kane, Inj. Ins. 124, 1914.
Pettit, Mich. B. 233, 201, 1906.
Phillips, U. S. B. 85, 13, 1909.
Swenk, Nebr. Bd. Agr. R. f., 1909, 244.
Webster, U. S. C. 78, 1, 1906.
——— U. S. Y. B., 1906, 509.
——— U. S. Y. B., 1908, 569.
- Closterocerus cinctipennis**
Webster, Ann. Ent. Soc. Am. IV, 185, 1911.
Webster, Iowa, B. 130, 189, 1912.
- Closterocerus tricinatus**
Phillips, J. Agr. Res. II, 27, 1914.
- Closterocerus utahensis**
Phillips, J. Agr. Res. II, 28, 1914.
Webster & Parks, J. Agr. Res. I, 81, '13.
- Closterocerus trifasciatus**
Quaintance, U. S. B. 68, 29, 1907.
- Clothes louse, see** *Pediculus vestimenti*
- Clothes moth, see** *Tinea pellionella*
- Clothilla pulsatoria**
Felt, N. Y. St. Mus. B. 129, 28, 1909.
Felt, N. Y. St. Mus. B. 136, 33, 1912.
- Clothilla sp.**
Smith, N. J. B. 203, 43, 1907.
Whitmarsh, Ohio B. 253, 132, 1912.
- Clover aphid, see** *Aphis bakeri*
- Clover cutworm, see** *Mamestra trifolii*
- Clover-flower midge, see** *Dasyneura leguminicola*
- Clover-hay worm, see** *Hypsopygia costalis*
- Clover insects**
Folsom, Col. Rur. World, July 8, 1908, 217.
Folsom, Ill. B. 134, 117, 1909.
Folsom, Ill. Ent. R. 25, 41, 1909.
Westgate & Hillman, U. S. F. B. 455, 37, 1911.
- Clover leaf beetle, see** *Phytonomus punctatus*
- Clover-leaf midge, see** *Dasyneura trifolii*
- Clover-leaf weevil, see** *Phytonomus punctatus*
- Clover mite, see** *Bryobia pratensis*
- Clover root-borer, see** *Hylastinus obscurus*
- Clover root mealy bug, see** *Pseudococcus trifolii*
- Clover-seed caterpillar, see** *Enarmonia interstinctana*
- Clover seed chalcid, see** *Bruchophagus funebris*
- Clover-seed midge, see** *Dasyneura leguminicola*
- Clover-seed worm, see** *Enarmonia interstinctana*
- Clover stem-borer, see** *Languria mozdardi*
- Cnemidocoptes gallinae**
Banks, U. S. C. 92, 4, 1907.
O'Kane, Inj. Ins. 378, 1914.
- Cnemidocoptes mutans**
Banks, U. S. C. 92, 3, 1907.
Ewing, Oreg. Coll. B. 92, 7, 1913.
Koethen, Cal. Cult. XLI, 267, 1913.
O'Kane, Inj. Ins. 378, 1914.
Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 135, 1911.
- Cnidocampa flavescens**
Dyar, Pr. Ent. Soc. Wash. XI, 162, '09.

Cnidocampa flavescens (*Cont'd*)

- Felt, N. Y. R. 22, 47, 1907.
 Felt, Pr. N. Y. Fr. Grow. Assoc., 5th
 East. Meet., 148, 1907.
 Fernald, Mass. B. 114, 1907.
 Fernald & Summers, Ent. News, '07, 321.
 Marlatt, U. S. Fed. Hort. Bd. R. 8, '14.
 Slingerland & Crosby, Man. Fr. Ins.
 106, 1914.
 ——— U. S. Y. B., 1906, 514.

Coal oil

- Garman, Ky. B. 147, 14, 1910.

Coal tar disinfectant

- U. S. D. A. Ins. & Fung. Bd. Ins.
 2, p. 28, 1914.

Coal tar for peach borers

- Rur. N. Y., 1909, 26, 110.

Coccidae, host list California

- Essig, Pom. Jr. Ent. I, 53, 1909.

Coccidae of Wisconsin

- Severin & Severin, J. Ec. Ent. II, 296,
 1909.

Coccidula lepida

- Britton, Conn. B. 181, 6, 1914.

Coccinella abdominalis

- Essig, Cal. Hort. B. I, 5, 192, 1912.
 Essig, Cal. Hort. B. I, 7, 286, 1912.
 Essig, Pom. Jr. Ent. III, 608, 1911.
 Isaac, Bug vs. Bug, 15, 1906.
 Parker, U. S. B. 111, 22, 1913.

Coccinella californica

- Davidson, U. S. D. A. B. 100, 38, 1914.
 Essig, Pom. Jr. Ent. III, 607, 1911.
 Essig, Cal. Hort. B. II, 1-2, 207, 1913.
 Isaac, Bug vs. Bug, 15, 1906.
 Parker, U. S. B. III, 22, 1913.

Coccinella juliana

- Davidson, U. S. D. A. B. 100, 38, 1914.

Coccinella monticola

- Palmer, Ann. Ent. Soc. Am. VII, 222,
 1914.

Coccinella munda

- Britton, Conn. B. 181, 17, 1914.
 Sanborn, Okla. B. 98, 90, 1912.

Coccinella notata

- Sanborn, Okla. B. 98, 11, 1912.

Coccinella novemnotata

- Britton, Conn. B. 181, 15, 1914.
 Chittenden, Va. Truck Exp. Sta. B. 2,
 24, 1909.
 Felt, N. Y. St. Mus. Mem. 8, 691, 1906.
 Felt, N. Y. R. 25, 86, 1910.

- Forbes, Ill. Ent. R. 23, 179, 1905.

- McGregor, U. S. C. 150, 9, 1912.

- McGregor, U. S. C. 172, 16, 1913.

- Palmer, Ann. Ent. Soc. Am. VII, 226,
 1914.

- Smith, Nebr. C. Ins. Pest Bur. 4, 3,
 1908.

- Smith, Nebr. Bd. Agr. R. f., 1908, 314.

- Symons, Md. B. 101, 196, 1905.

- Webster, U. S. C. 85, 5, 1907.

- Webster, J. Ec. Ent. III, 503, 1910.

- Webster, U. S. B. 112, 31, 1912.

- Webster & Phillips, U. S. B. 110, 129,
 1912.

- Weiss, J. Ec. Ent. VI, 408, 1913.

Coccinella oculata

- Isaac, Bug vs. Bug, 15, 1906.

Coccinella 5-notata

- Palmer, Ann. Ent. Soc. Am. VII, 219,
 1914.

Coccinella sanguinea

- Essig, Cal. Hort. B. II, 1-2, 207, 1913.
 Ewing, Oreg. B. 121, 64, 1914.
 Isaac, Bug vs. Bug, 15, 1906.
 Morrill & Back, U. S. B. 102, 9, 1912.
 Palmer, Ann. Ent. Soc. Am. VII, 232,
 1914.
 Sanborn, Okla. B. 98, 11, 1912.
 Webster, U. S. C. 85, 5, 1907.

Coccinella septempunctata

- Howard, U. S. R. Ent., 1906, 12.

Coccinella sp.

- Smith, N. J. R., 1906, 567.

Coccinella transversoguttata

- Britton, Conn. B. 181, 16, 1914.

Coccinella trifasciata

- Britton, Conn. B. 181, 16, 1914.
 Essig, Cal. Hort. B. II, 1-2, 206, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 691,
 1906.

Coccinellidae, abundance of

- Ewing, J. Ec. Ent. VII, 440, 1914.

Coccinellidae in Oregon.

- Ewing, J. Ec. Ent. VI, 404, 1913.

Coccophagus flavoscutellum

- Cotton, Ohio Nurs. Orch. Insp. B. 7, 35,
 1906.

- Johnson, Colo. B. 116, 11, 1906.

- Sanders, U. S. C. 64, 4, 1905.

- Smith, N. J. R., 1905, 601.

Coccophagus immaculatus

- Surface, Pa. D. A. Zool. V, 2, 58, 1907.

Coccophagus lecanii

Cotton, Ohio Nurs. Orch. Insp. B. 7, 35, 1906.

Dickerson, U. S. B. 67, 48, 1907.

Essig, Cal. Hort. B. II, 1-2, 279, 1913.

Forbes, Ill. B. 112, 357, 1907.

Forbes, Ill. Ent. R. 24, 114, 1908.

Isaac, Bug vs. Bug, 23, 1906.

Johnson, Colo. B. 116, 11, 1906.

Quayle, Cal. B. 214, 476, 478, 1911.

Quayle, J. Ec. Ent. IV, 512, 1911.

Sanders, U. S. C. 64, 4, 1905.

Smith, N. J. R., 1905, 607.

Symons & Cory, Md. B. 149, 87, 1910.

Timberlake, J. Ec. Ent. VI, 298, 1913.

Coccophagus lunulatus

Essig, Cal. Hort. B. II, 1-2, 278, 1913.

Quayle, Cal. B. 222, 136, 1911.

Quayle, J. Ec. Ent. IV, 512, 1911.

Timberlake, J. Ec. Ent. VI, 299, 1913.

Coccophagus sp.

Smith, N. J. R., 1905, 596.

Smith, N. J. R., 1906, 571.

Coccophagus sp. in grape scale

Zimmer, U. S. B. 97, 119, 1912.

Coccophoctonus sp.

Issac, Bug vs. Bug, 23, 1906.

Coccotorus prunicida, see Anthonomus scutellaris**Coccus citricola**

Paine, Cal. Cult. XLII, 752, 1914.

——— Cal. Cult. XLIII, 99, 1914.

——— Pac. Rur. Press, LXXXVIII, 226, 1914.

Coccus elongatus

Sanders, J. Ec. Ent. II, 438, 1909.

Coccus hesperidum

Britton, Conn. B. 151, 7, 1905.

Britton, Conn. R. 5, 237, 1906.

Carnes, Cal. Hort. Comm. Bien. R. 2, 186, 1907.

Coit, Ariz. B. 58, 318, 1908.

Davis, Ill. Ent. R. 27, 123, 1912.

Douglass, Ind. Ent. R. 4, 166, 1912.

Essig, Cal. Hort. B. II, 1-2, 114, 1913.

Fernald, Mass. Bd. Agr. R. 55, 387, '08.

Gahan, Md. B. 119, 13, 1907.

Gossard, O. Farm., Dec. 18, 1909, 546.

Kell, Pom. Jr. Ent. IV, 798, 1912.

Kell, Cal. Hort. B. II, 8, 1913.

Morrill, J. Ec. Ent. VI, 191, 1913.

Morrill, Ariz. Comm. Agr. & Hort. R. 6, 16, 31, 1914.

Newell & Barber, U. S. B. 122, 65, 1913.

Pease, Cal. Cult., XXX, 571, 1908.

Quayle, Cal. B. 214, 475, 1911.

Quayle, Cal. B. 223, 194, 1911.

Quayle, J. Ec. Ent. IV, 512, 1911.

Sanders, J. Ec. Ent. II, 436, 1909.

Webster, U. S. F. B. 307, 16, 1907.

Williams, Ala. Poly. Ins. B. 157, 661, '11.

——— Pac. Rur. Press, LXXXII, 64, '11.

——— S. W. Stockm., Mar. 5, 1909, 3.

Coccus hesperidum, parasites of

Timberlake, J. Ec. Ent. VI, 293, 1914.

Coccus longulus

Essig, Pom. Jr. Ent. I, 31, 1909.

Gahan, Md. B. 119, 14, 1907.

Morrill, Cal. Cult. XLI, 102, 1913.

Vosler, Cal. Hort. B. III, 6, 241, 1914.

Coccus ventralis

Carnes, Cal. Hort. Comm. Bien. R. 2, 187, 1907.

Cochylis ambigua

Ehrhorn, Pac. Rur. Press, LXXVI, 404, 1908.

Cockerell's kermes, see Kermes cockerelli**Cockroaches, see roaches****Codling moth, see Carpocapsa pomonella****Coelopisthia nematocida**

Hewitt, Can. Ent., 1911, 297.

Hewitt, Can. Exp. Farms, Ent. B. 5, 28, 1912.

Swaine, Ont. Ent. Soc. R. 43, 87, 1913.

Coenus delius

Felt, N. Y. St. Mus. Mem. 8, 697, 1906.

Coffee-bean weevil, see Araecerus fasciculatus**Coiled rose slug, see Emphytus cinctus****Colaspidea varicolor**

——— U. S. Y. B., 1908, 577.

Colaspis brunnea

Baldwin, Ind. Ent. R. 5, 124, 1912.

Forbes, Ill. Ent. R. 23, 104, 1905.

Gossard, Ohio B. 233, 150, 1911.

Johnson & Hammar, U. S. B. 89, 18, '10.

O'Kane, Inj. Ins. 264, 1914.

Sanderson, Ins. Pests, 449, 1912.

Slingerland & Crosby, Man. Fr. Ins. 393, 1914.

Colaspis favosa

Newell & Smith, U. S. B. 52, 70, 1905.

Swenk, Nebr. Bd. Agr. R. f., 1910, 366.

- Colastus semitectus**
Forbes, Ill. Ent. R. 23, 181, 1905.
- Colastus truncatus**
Felt, N. Y. St. Mus. Mem. 8, 491, '06.
- Coleophora caryaefoliella**
Chittenden, Nut Grow., Jan. '06, 108.
Russell, U. S. B. 64, 79, 1910.
Worsham, Ga. Bd. Hort. Soc., '10, 119.
Worsham, Ga. Bd. Ent. B. 33, 119, '10.
——— U. S. Y. B., 1908, 579.
- Coleophora fletcherella**
Baldwin, Ind. Ent. R. 5, 87, 1912.
Bethune, Ont. Agr. Coll. B. 158, 11, '07.
Caesar, Ont. Ent. Soc. R. 42, 28, 1912.
Douglass, Ind. Ent. R. 3, 119, 1910.
Ehrhorn, Cal. Fr. Grow., Dec. 12, 1908, 12.
Ehrhorn, Pac. Rur. Press, LXXVI, 372, 1908.
Felt, N. Y. R. 24, 47, 1909.
Felt, N. Y. R. 26, 41, 1911.
Gossard, Ohio B. 164, 17, 1905.
Gossard, Ohio B. 198, 40, 1908.
Gossard, Ohio B. 233, 110, 1911.
Hammar, U. S. B. 80, 33, 1909.
Johannsen, Me. B. 177, 26, 1910.
Johannsen & Patch, Me. B. 195, 239, 1911.
Johannsen & Patch, Me. Comm. Agr. R. f., 1910, 365.
Lochhead, Ont. Agr. Coll. B. 144, 31, 1905.
Lochhead, Syn. Ec. Ent. 53, 1914.
O'Kane, Inj. Ins. 306, 1914.
Sanderson, Ins. Pests, 618, 1912.
Schoene & Fulton, N. Y. St. C. 27, 1, 1913.
Slingerland & Crosby, Man. Fr. Ins. 47, 1914.
Swaine, Ont. Ent. Soc. R. 41, 92, 1911.
Treherne, Pr. Ent. Soc. B. C. 4, 25, '14.
- Coleophora laricella**
Felt, N. Y. St. Mus. Mem. 8, 170, '05.
Fletcher, Ont. Ent. Soc. R. 36, 90, '06.
Gibson, Ont. Ent. Soc. R. 41, 14, 1910.
Herrick, Ann. Ent. Soc. Am. IV, 68, '11.
Herrick, J. Ec. Ent. V, 172, 1912.
Herrick, N. Y. C. B. 322, 39, 1912.
Johannsen & Patch, Me. B. 195, 239, '11.
Patch, Me. B. 134, 218, 1906.
Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
- Coleophora limosipennella**
Felt, N. Y. St. Mus. Mem. 8, 167, 1905.
Felt, N. Y. R. 21, 96, 1906.
Felt, N. Y. Fr. Grow. Assoc., '06, 121.
Felt, U. S. B. 60, 90, 1906.
Felt, N. Y. R. 25, 99, 1910.
Felt, N. Y. R. 27, 110, 1912.
- Coleophora malivorella**
Baldwin, Ind. Ent. R. 5, 87, 1912.
Bethune, Ont. Agr. Coll. B. 158, 11, '07.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 49, 1913.
Felt, N. Y. R. 24, 47, 1909.
Gossard, Ohio B. 164, 17, 1905.
Gossard, Ohio B. 198, 40, 1908.
Gossard, Ohio B. 233, 110, 1911.
Lochhead, Ont. Agr. Coll. B. 144, 31, '05.
Lochhead, Syn. Ec. Ent. 53, 1914.
O'Kane, Inj. Ins. 307, 1914.
Parrott, N. Y. Dept. Agr. B. 50, 1747.
Sanderson, Ins. Pests, 618, 1912.
Schoene & Fulton, N. Y. St. C. 25, 1, '13.
Slingerland & Crosby, Man. Fr. Ins. 49, 1914.
Symons, Md. B. 101, 139, 1905.
- Coleophora sp.**
Gossard, Fla. B. 79, 304, 1905.
Parrott, N. Y. Fr. Grow. Assoc., '09, 23.
- Coleothrips trifasciata**
Pettit, Mich. B. 233, 175, 1906.
- Colias eurytheme**, *see* **Eurymus**
- Collops bipunctatus**
Webster, U. S. B. 112, 31, 1912.
- Collops quadrimaculatus**
Cotton, Ohio Nurs. Orch. Insp. B. 7, 33, 1906.
Folsom, Ill. Ent. R. 25, 90, 1909.
Marlatt, U. S. B. 62, 64, 1906.
- Collops vittatus**
Wildermuth, U. S. D. A. B. 124, 26, '14.
- Colopha ulmicola**
Felt, N. Y. St. Mus. Mem. 8, 186, 1905.
Felt, J. Ec. Ent. II, 306, 1909.
Felt, N. Y. R. 25, 81, 1910.
Moore, Wis. R. 23, 235, 1906.
Moore, Wis. B. 24, 376, 1907.
Patch, Me. B. 181, 196, 1910.
Smith, N. J. R., 1910, 343.
- Colorado pine beetle**, *see* **Dendroctonus approximatus**
- Colorado potato beetle**, *see* **Leptinotarsa decemlineata**

- Comma butterfly**, *see* *Polygonia comma*
- Commelina owlet-moth**, *see* *Prodenia commelinae*
- Commercial and new insecticides**
Surface, Pa. D. A. Zoöl. V, 12, 410, 1908.
- Commercial lime-sulphur mixtures**
Jordan, N. Y. St. B. 321, 453, 1909.
- Common names**, *list*
Burgess, J. Ec. Ent. I, 209, 1908.
——— U. S. B. 60, 26, 1906.
- Companion bark-beetle**, *see* *Tomicus avulsus*
- Compsilura concinnata**
Britton, Conn. B. 182, 20, 1914.
Burgess, U. S. F. B. 564, 6, 1914.
Howard, Mass. For. R. 7, 96, 1911.
Howard, U. S. R. Ent., 1911, 10.
Howard, Mass. For. R. 9, 72, 1912.
Howard, Mass. For. R. 10, 83, 1913.
Howard, U. S. R. Ent., 1913, 2.
Howard, Ann. Ent. Soc. Am. VII, 86, 1914.
Howard, U. S. R. Ent., 1914, 3.
Howard & Fiske, U. S. B. 91, 142, 218, 263, 1911.
Tothill, Ent. Soc. Ont. R. 43, 57, 1913.
- Compsomyia**, *see* *Chrysomyia*
- Compsus auricephalus**
Howard, U. S. R. Ent., 1914, 11.
- Comyntas butterfly**, *see* *Everes comyntas*
- Comys fusca**
Cooper, Pac. Rur. Press, LXIX, 311, '05.
Cotton, Ohio Nurs. Orch. Insp. B. 7, 35, 1906.
Essig, Hort. B. II, 1-2, 269, 1913.
Issac, Bug *vs.* Bug, 22, 1906.
Johnson, Colo. B. 116, 11, 1906.
Quayle, Cal. B. 214, 479, 1911.
Quayle, J. Ec. Ent. IV, 512, 1911.
Sanders, U. S. C. 64, 4, 1905.
- Conchaspis angraei**
Howard, U. S. R. Ent., 1911, 32.
Marlatt, J. Ec. Ent. V, 77, 1912.
- Cone nosed bed bug**, *see* *Conorhinus sanguisugus*
- Cones and seeds**, *insect injury*
Miller, U. S. D. A. B. 95, 1914.
- Confused flour-beetle**, *Tribolium confusum*
- Coniotus subpubescens**
Vaile, Cal. Cult., XL, 747, 1913.
Vaile, Cal. Hort. B. II, 7, 591, 1913.
- Conkey's Bug and Moth Killer**
U. S. D. A. Ins. & Fung. Nos. 32, 58, '14.
- Conkey's Lice Liquid**
U. S. D. A. Ins. & Fung. Nos. 32, 58, '14.
- Conkey's Nox-i-cide**
——— U. S. D. A. Ins. & Fung. Nos. 9, 16, 22, 1913.
- Conkey's Dip and Disinfectant**
——— U. S. D. A. Ins. & Fung. Nos. 9, 16, 22, 1913.
- Conocaelius populator**
Chittenden, U. S. C. 32, 3rd Ed., 5, 1907.
- Conophthorus coniperda**
Hitchings, Me. Ent. R. 3, 4, 1908.
Johannsen, Me. B. 177, 40, 1910.
- Conorhinus sanguisugus**
Herrick, Household Ins. 422, 1914.
Morrill, J. Ec. Ent. VI, 189, 1913.
Morrill, S. W. Stockm., May 16, 1913, 10.
- Conotelus obscurus**
Quaintance & Brues, U. S. B. 50, 127, 1905.
- Conotrachelus affinis**
Brooks, W. Va. R. f. 1909-1910, 186.
Brooks, W. Va. B. 128, 178, 1910.
Pierce, U. S. B. 73, 46, 1908.
- Conotrachelus anaglypticus**
Felt, N. Y. St. Mus. Mem. 8, 544, 1906.
Jenne, Pr. Ent. Soc. Wash. XIII, 89, '11.
- Conotrachelus crataegi**
Ehrhorn, Pac. Rur. Press LXXVI, 388, 1908.
Gossard, Ohio B. 233, 132, 1911.
Haseman, Mo. Hort. Soc., 1911, 263.
O'Kane, Inj. Ins. 336, 1914.
Slingerland, N. Y. C. B. 235, 89, 1906.
Slingerland & Crosby, N. Y. C. B. 252, 340, 1908.
Slingerland & Crosby, Man. Fr. Ins. 236, 1914.
Slingerland, Herrick & Crosby, N. Y. C. B. 283, 475, 1910.
- Conotrachelus elegans**
Pierce, U. S. B. 100, 78, 1912.
——— U. S. Y. B., 1907, 549.
- Conotrachelus juglandis**
Britton, J. Ec. Ent. V, 464, 1912.
Britton, J. Ec. Ent. VI, 197, 1913.
Britton, Rur. N. Y., 1913, 422.
Britton & Kirk, Conn. R. 12, 240, 1913.
Brooks, W. Va. R. f., 1909-1910, 184.

- Brooks, W. Va. B. 128, 176, 1910.
 Chittenden, Nut Grow., Mar. '06, 139.
 Felt, N. Y. St. Mus. Mem. 8, 581, 1906.
 Pierce, U. S. B. 100, 78, 1912.
 ——— U. S. Y. B., 1908, 579.
- Conotrachelus naso**
 Brooks, W. Va. R. f. 1909–1910, 188.
 Brooks, W. Va. B. 128, 179, 1910.
 Pierce, U. S. B. 100, 78, 1912.
- Conotrachelus nenuphar**
 Adams, Ark. B. 92, 11, 1907.
 Alderman, Giddings & Rumsey, W. Va. C. 7, 28, 1913.
 Baldwin, Ind. Ent. R. 5, 54, 1912.
 Barre & Conradi, S. C. B. 141, 46, 1909.
 Bethune, Ont. Agr. Coll. B. 158, 20, '07.
 Britton, Conn. R. 4, 219, 1905.
 Brooks, Prai. Farm., Nov. 30, 1905, 4.
 Brooks, W. Va. R. f., 1909–1910, 133.
 Brooks, W. Va. B. 126, 106, 1910.
 Buckley, Me. Dept. Agr. B., vol. X, 3, 6, 1911.
 Burgess, Ohio Nurs. Orch. Insp. R. 4, 10, 1906.
 Burgess, U. S. B. 60, 72, 1906.
 Caesar, Ont. Ent. Soc. R. 40, 17, 1910.
 Caesar, Ont. Agr. Coll. B. 187, 37, 1911.
 Caesar, Ont. Ent. Soc. R. 41, 21, 1911.
 Caesar, Ont. Ent. Soc. R. 42, 28, 1912.
 Caesar, Ont. Ent. Soc. R. 43, 75, 1913.
 Caesar, Ont. Ent. Soc. R. 44, 49, 1914.
 Chandler, Mo. Hort. Soc., 1909, 351.
 Chandler, Mo. B. 102, 245, 1912.
 Chase, Ga. Bd. Ent. B. 32, 7, 1910.
 Chase, Ga. Bd. Ent. B. 38, 15, 1913.
 Clinton & Britton, Conn., R. f., 1909, 1910, 609, 1911.
 Close & Ballard, Md. B. 159, 190, 1911.
 Conradi, U. S. B. 60, 69, 1906.
 Conradi, S. C. R. 21, 35, 1908.
 Conradi & Thomas, S. C. B. 143, 23, '09.
 Crandall, Conn. Farm., July 29, '05, 2.
 Davis, Amer. Cult., Apr. 23, 1910, 11.
 Dean, C. Gentl., June 7, 1913, 883.
 Dean & Pears, Kans. Agr. Educ. VI, 2, 26, 1913.
 Douglass, Ind. Ent. R. 1, 158, 1908.
 Douglass, Ind. Ent. R. 2, 87, 1910.
 Douglass, Ind. Ent. R. 3, 126, 1910.
 Douglass, Ind. Ent. R. 4, 47, 1912.
 Ehrhorn, Pac. Rur. Press, LXXVI, 388, 1908.
- Faurot, Mo. Fr. Exp. Sta. B. 23, 25, '12.
 Faurot, Mo. Bd. Agr. R. 45, 572, 1913.
 Fletcher, Ont. Ent. Soc. R. 37, 83, '07.
 Forbes, Ill. Hort. Soc. f. 1904, 91, 1905.
 Forbes, Ill. B. 108, 205, 1906.
 Fulton, Wright & Gregg, Pa. B. 110, 34, 1911.
 Funk, Pa. Dept. Agr. B. 152, 289, 1907.
 Garcia, N. Mex. B. 68, 50, 1908.
 Gardner, Can. Hort. XXX, 267, 1907.
 Gardner, Farm. World, Can., May 6, 1908, 8.
 Gee & Lathrop, Ann. Ent. Soc. Am. V, 391, 1912.
 Gibson, Can. Hort. XXXVI, 240, 1913.
 Gill, Rur. N. Y., 1910, 1002, 1117.
 Gillette, Colo. B. 114, 17, 1906.
 Gossard, Ohio B. 164, 20, 1905.
 Gossard, Ohio B. 198, 50, 1908.
 Gossard, Ohio B. 233, 90, 1911.
 Haseman, Mo. Hort. Soc., 1911, 249.
 Hayhurst, Farm & Ranch, Feb. 5, '10, 4.
 Hayhurst, Pr. Ark. Hort. Soc., '10, 44.
 Headlee, N. J. Hort. Soc., 1913, 51.
 Hewitt & Hayhurst, Ark. B. 109, 431, 1911.
 Hinds, Ala. Poly. B. 146, 101, 1909.
 Hinds, Pr. Ala. Hort. Soc. 9, 123, 1911.
 Hitchings, Me. Ent. R. 5, 5, 1910.
 Houghton, Del. R. 16–17–18, 83, 1907.
 Howard, U. S. R. Ent., 1905, 288.
 Howard, U. S. R. Ent., 1906, 17.
 Howard, U. S. R. Ent., 1907, 22.
 Howard, U. S. R. Ent., 1908, 19.
 Howard, U. S. R. Ent., 1911, 21.
 Jarvis, Conn. Storrs B. 56, 240, 263, '09.
 Johannsen, Me. B. 177, 40, 1910.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 371.
 Johnson & Girault, U. S. C. 73, 1, 1906.
 Lamson, Conn. Storrs B. 71, 71, 1912.
 Langlois, Iowa Agric., May, 1908, 367.
 Lochhead, Ont. Agr. Coll. B. 144, 32, '05.
 Lochhead, Ont. Ent. Soc. R. 40, 68, '10.
 Lochhead, Syn. Ec. Ent. 80, 1914.
 Lombard, Vt. Hort. Soc. R. 9, 23, 1912.
 Mason, Farm. Guide, Mar. 30, 1912, 5.
 Melander, Cal. Fr. Grow., Nov. 4, '11, 4.
 Moore, Wis. B. 190, 24, 1910.
 Moore, Wis. B. 207, 27, 1911.
 Morris, Okla. B. 64, 10, 1905.

Conotrachelus nenuphar (*Cont'd*)

- Munson, Me. Dept. Agr. Quart. B., vol. IV, 1, 17, 1905.
 Newell & Smith, U. S. B. 52, 69, 1905.
 Nicholson, Okla. B. 76, 23, 1908.
 Niven, Prog. Farm., Mar. '18, 1911, 302.
 O'Kane, Inj. Ins. 332, 1914.
 Osborn, U. S. B. 52, 51, 1905.
 Parrott, N. Y. Fr. Grow. Assoc., '12, 209.
 Patch, Me. B. 162, 363, 1908.
 Patterson, Conn. Farm., Aug. 6, 1910, 7.
 Patterson, N. J. R., 1912, 452.
 Pierce, U. S. B. 74, 46, 1908.
 Pierce, U. S. B. 100, 78, 1912.
 Poole, Farm & Ranch, Mar. 10, 1906, 10.
 Price, Va. C. 7, 35, 1909.
 Putnam, Amer. Cult., May 11, 1907, 1.
 Quaintance, U. S. Y. B., 1905, 325.
 Quaintance, Mich. Hort. Soc., 1905-1906, 118, 1907.
 Quaintance, Better Fr., June 1909, 11.
 Quaintance & Jenne, U. S. B. 103, 13, 1912.
 Quaintance, Jenne, Scott & Braucher, U. S. B. 80, 113, 1911.
 Quaintance & Scott, U. S. B. 115, 87, '12.
 Quaintance & Scott, U. S. F. B. 492, 11, 1912.
 Rosenfeld, La. Hort. Soc., 1908, 105.
 Ruggles, Minn. Hort. Soc., 1909, 138.
 Rumsey, W. Va. Hort. Soc. 14th R. 29, 1907.
 Rumsey, W. Va. B. 127, 137, 1910.
 Rumsey & Brooks, W. Va. R. f. 1905-1906, 19.
 Sanderson, Ins. Pests, 576, 1912.
 Schoene & Fulton, N. Y. St. C. 25, 6, '13.
 Scott, Mich. Hort. Soc., 1910, 167, 1911.
 Scott, Va. Agr. R. f. 1913, 129, 1913.
 Scott & Quaintance, Better Fr., July 1910, 19.
 Scott & Quaintance, U. S. C. 120, 1, '10.
 Scott & Quaintance, U. S. F. B. 440, 5, 1911.
 Sherman, Ont. Ent. Soc. R. 36, 22, 1906.
 Sherman, Prog. Farm., Apr. 2, 1908, 17.
 Slingerland, Rur. N. Y., 1906, 346.
 Slingerland, N. Y. C. B. 235, 84, 1906.
 Slingerland, Rur. N. Y., 1907, 256.
 Slingerland, Rur. N. Y., 1908, 473, 566.
 Slingerland & Crosby, N. Y. C. B. 252, 340, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 243, 1914.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 474, 1910.
 Smith, Ga. Bd. Ent. B. 17, 95, 1905.
 Smith, Pr. Columbus Hort. Soc., 1905, 75.
 Smith, South. Cult., Mar. 15, 1905, 20.
 Smith, N. J. R., 1906, 520.
 Smith, Ga. Bd. Ent. B. 20, 165, 1906.
 Smith, Pr. Ga. Hort. Soc., 1907, 151.
 Smith, U. S. B. 67, 103, 1907.
 Smith, N. C. R. 31, 28, 1908.
 Smith, N. J. B. 213, 45, 1908.
 Smith, N. J. R., 1909, 397.
 Smith, N. C. B. 206, 80, 85, 1910.
 Smith, N. J. B. 235, 13, 1911.
 Smith, N. J. R., 1910, 320.
 Smith, N. J. R., 1911, 466.
 Smith, N. J. Hort. Soc., 1912, 59.
 Smith & Lewis, U. S. B. 60, 78, 1906.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 7, 9.
 Stedman, Mo. Hort. Soc., 1905, 56.
 Stene, R. I. Bd. Agr. R. 25, 150, 1910.
 Stephens, Nat'l Fr. Grow., Dec. 1905, 26.
 Stephens, Prai. Farm., July 20, 1905, 4.
 Stephens, Nebr. Hort. Soc., 1906, 28.
 Strand, Or. Judd Farm., May 6, 1905, 592.
 Stringfellow, Farm & Ranch, Apr. 21, 1906, 10.
 Stringfellow, Farm & Ranch, Feb. 22, 1908, 10.
 Stuckey, South. Cult., Mar. 15, 1910, 33.
 Surface, Pa. D. A. Zoöl. B. II, 11 & 12, 333, 1905.
 Surface, Pa. D. A. Zoöl. B. V, 12, 395, 1908.
 Surface, Pa. R. 16, 122, 1910.
 Surface, Rur. N. Y., 1913, 891.
 Swaine, Ont. Ent. Soc. R. 41, 94, 1911.
 Swaine, Ont. Ent. Soc. R. 42, 73, 1912.
 Swenk, Nebr. Hort. Soc. B. 19, 24, 1908.
 Swenk, Nebr. Hort. Soc. 1909, 75.
 Symons, Md. B. 101, 142, 148, 151, '05.
 Symons, Md. Hort. Soc., 1908, 175, '09.
 Symons, Md. Hort. Soc., 1909, 170, '10.
 Taylor, Col. Rur. World, Feb. 24, '09, 59.
 Taylor, Kans. Hort. Soc., 1909, 256.
 Taylor, Mo. Fr. Exp. Sta. B. 21, 11, '09.
 Taylor, J. Ec. Ent. II, 154, 1909.

Conotrachelus nenuphar (*Cont'd*)

- Taylor, Better Fr., Feb. 1911, 19.
 Taylor, Better Fr., Mar. 1911, 23.
 Thompson, Prog. Farm., Apr. 23, 1910, 381.
 Treherne, Ont. Ent. Soc. R. 41, 20, '11.
 Treherne, Ont. Ent. Soc. R. 42, 21, '12.
 Treherne, Pr. Ent. Soc. B. C. 4, 22, '14.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 481, 1911.
 Washburn, Conn. Farm., Mar. 11, '05, 1.
 Washburn, Minn. Hort. Soc., '05, 180.
 Washburn, U. S. B. 52, 56, 1905.
 Washburn, U. S. B. 60, 85, 1906.
 Washburn, Minn. R. 12, 83, 1908.
 Waugh, Mass. Crop R. f. June '07, 35.
 Wells, Mich. Farm., June 15, 1907, 610.
 Whiteside, Mont. Bd. Hort. f. 1907-1908, 39, 1909.
 Wilken, Mich. Farm., Jan. 18, 1913, 28.
 Williams & Price, Ala. Poly. B. 152, 5, 407, 1911.
 Williams & Price, Ala. Poly. B. 156, 123, 1911.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 170.
 Worsham, Ga. Bd. Ent. B. 27, 76, 1908.
 Worsham, Ga. Bd. Ent. B. 30, 109, '09.
 Worsham, Ga. Hort. Soc., 1909, 109.
 Worsham, J. Ec. Ent. II, 207, 1909.
 Worsham, Pr. Ga. Hort. Soc., 1909, 76.
 ——— Kans. Hort. Soc., 1911, 314.
 ——— Rur. N. Y., 1909, 752.
 ——— Rur. N. Y., 1910, 516.
 ——— U. S. Y. B., 1905, 633.
 ——— U. S. Y. B., 1906, 512.
 ——— U. S. Y. B., 1907, 547.
 ——— U. S. Y. B., 1908, 576.
 ——— U. S. R. Ent., 1910, 24.
 ——— Va. Agr. R. f., 1905, 107.

Conotrachelus posticatus

- Brooks, W. Va. R. f. 1909-1910, 189.
 Brooks, W. Va. B. 128, 180, 1910.

Conotrachelus seniculus

- Felt, N. Y. St. Mus. Mem. 8, 582, 1906.

Con-sol

- Fernald, Mass. B. 116, 17, 1907.
 Taft, Nat'l Fr. Grow., Mar. 1905, 9.
 South. Plant., Mar. 1906, 20.

Contarinia johnsoni

- Burgess, Ohio Nurs. Orch. Insp. B. 5, 12, 1905.

Ehrhorn, Pac. Rur. Press, LXXVI, 404, 1908.

- Felt, J. Ec. Ent. I, 243, 1908.
 Felt, Grape Belt., 12, June 1908, 4.
 Felt, Grape Belt., 18, May 1909, 10.
 Felt, J. Ec. Ent. II, 257, 1909.
 Felt, N. Y. R. 24, 15, 1909.
 Felt, N. Y. R. 25, 92, 1910.
 Hartzell, N. Y. St. B. 331, 514, 1910.
 Johnson, Pa. Dept. Agr. R. 17, 588, '11.
 O'Kane, Inj. Ins. 331, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 437, 1914.
 ——— U. S. Y. B., 1908, 576.

Contarinia pyrivora

- Britton & Walden, Conn. R. 13, 239, '14.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 67, 1913.
 Ehrhorn, Pac. Rur. Press LXXVI, 388, 1908.
 Felt, N. Y. R. 28, 97, 1913.
 O'Kane, Inj. Ins. 346, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 225, 1914.
 Smith, N. J. Bd. Agr. R. 37, 187, 1910.
 Smith, N. J. R., 1911, 422.
 Weiss, N. J. R., 1912, 433.

Contarinia sorghicola

- Ball & Leidigh, U. S. F. B. 322, 21, '08.
 Dean, J. Ec. Ent. III, 205, 1910.
 Dean, U. S. B. 85, 39, 1911.
 Herrick, Ent. News, 1909, 116.
 O'Kane, Inj. Ins. 219, 1914.
 Piper, Pr. Ent. Soc. Wash. X, 109, '08.
 Swenk, Nebr. Ent. B. 1, 65, 1913.
 Treherne, Ent. Soc. Ont. R. 39, 47, '09.
 ——— U. S. Y. B., 1907, 543.
 ——— U. S. Y. B., 1908, 570.

Contarinia spp.

- Felt, J. Ec. Ent. I, 225, 1908.

Contarinia tritici

- Bruner & Swenk, Nebr. B. 96, 28, 1907.
 Burgess, U. S. B. 60, 71, 1906.
 Dean, Kans. Agr. Educ. I, 4, 47, 1909.
 Felt, J. Ec. Ent. V, 286, 1912.
 Felt, J. Ec. Ent. V, 289, 1912.
 Fletcher, Can. Exp. Farms B. 52, 16, 1905.
 Gossard, Ind. Farm., July 20, '05, 11.
 Gossard, Farm. Guide, Aug. 5, 1905, 6.
 Gossard, O. Farm., July 15, 1905, 34.
 Gossard, O. Farm., Aug. 12, 1905, 98.

- Gossard, Ohio P. B. 266, 1905.
 Gossard, Prai. Farm., July 27, 1905, 3.
 Gossard, Ohio B. 233, 56, 1911.
 Lochhead, Syn. Ec. Ent. 88, 1914.
 Menges, Pa. Dept. Agr. R. 17, 476, '11.
 Menges, Pa. Dept. Agr. B. 222, 76, '12.
 O'Kane, Inj. Ins. 218, 1914.
 Pettit, Mich. B. 244, 211, 1907.
 Pettit, Mich. B. 258, 318, 1910.
 Sanderson, Ins. Pests, 145, 1912.
 Webster, U. S. B. 67, 94, 1907.
 Webster, U. S. Y. B., 1907, 250.
 ——— U. S. Y. B., 1905, 634.
- Contarinia violicola**
 Chittenden, Florists' Rev., Oct. 5, 1905, 1100.
 Felt, N. Y. R. 22, 59, 1907.
 Felt, U. S. B. 67, 41, 1907.
 Slingerland & Crosby, N. Y. C. B. 252, 346, 1908.
 ——— U. S. Y. B., 1906, 516.
- Contarinia viticola**
 Felt, J. Ec. Ent. II, 257, 1909.
- Conura sp.**
 Girault, U. S. B. 68, 45, 1907.
- Conventzia hageni**
 Ewing, Oreg. B. 121, 56, 1914.
 Quayle, Cal. B. 234, 506, 1912.
 Quayle, J. Ec. Ent. VI, 85, 1913.
- Convergent ladybird, see Hippodamia convergens**
- Convex flea-beetle, see Psylliodes convexior**
- Cooper's V₁ tree spray**
 Smith, N. J. R., 1908, 375.
- Cooper's V₂ fluid**
 Smith, N. J. R., 1909, 370.
- Cooper's V₂ tree spray**
 Smith, N. J. R., 1908, 375.
- Copestylum marginatum**
 Hunter, Pratt & Mitchell, U. S. B. 113, 37, 1912.
- Copidosoma sp.**
 Johnson, Colo. B. 98, 21, 1905.
- Copper sulphate against mosquitoes**
 Britton & Viereck, Conn. R. 4, 306, '05.
- Copper sulphate solution, formula**
 Taft, Mich. Hort. Soc., 1908, 142, 1909.
- Coptocycla aurichalcea**
 Smith, N. J. B. 229, 10, 1910.
- Coptocycla bicolor**
 Chittenden, Ins. Inj. Veg. 238, 1907.
 Sanderson, Ins. Pests, 435, 1912.
 Symons, Md. B. 101, 177, 1905.
 ——— C. Gentl., 1909, 755.
- Coptocycla guttata**
 Chittenden, Ins. Inj. Veg. 238, 1907.
 Smith, N. J. B. 229, 11, 1910.
- Coptocycla signifera**
 Sanderson, Ins. Pests, 436, 1912.
 Symons, Md. B. 101, 179, 1905.
- Coptodisca splendoriferella**
 Felt, N. Y. R. 28, 95, 1913.
 Garman, Ky. B. 133, 17, 1908.
 Gossard, Ohio B. 233, 111, 1911.
 O'Kane, Inj. Ins. 310, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 75, 1914.
- Cordillacris occipitalis**
 Bruner, U. S. B. 54, 64, 1905.
- Corethra fuliginosus**
 Felt, N. Y. R. 20, 458, 1905.
- Corethra lintneri**
 Grossbeck, N. J. R., 1907, 560.
- Corimelaena pulicaria**
 Chittenden, Ins. Inj. Veg. 183, 1907.
 Forbes, Ill. Ent. R. 23, 115, 1905.
 O'Kane, Inj. Ins. 348, 1914.
 Pettit, Mich. B. 233, 174, 1906.
 Slingerland & Crosby, Man. Fr. Ins. 324, 1914.
 ——— U. S. Y. B., 1906, 511.
- Coriscus ferus, see Reduviolus**
- Corizus hyalinus**
 Johnson, Colo. B. 116, 10, 1906.
- Corizus pictipes**
 Morril, U. S. B. 86, 91, 1910.
 Sanderson, U. S. B. 57, 46, 1906.
- Corn-ear worm, see Heliothis obsoleta**
- Corn insects**
 Clay, Tex. Agr. & Statis. R., 1905, 265.
 Conradi, Tex. Stockm. Farm., Sept. 9, 1908, 4.
 Dean, Kans. Agr. Educ. I, 4, 1909.
 Douglass, C. Gentl., 1910, 561.
 Felt, C. Gentl., 1906, 715.
 Forbes, Ill. Ent. R. 23, 1, 1905.
 Forbes, Prai. Farm., Oct. 15, 1909, 3.
 Forbes, Prai. Farm., June 1, 1910, 9.
 Garman, Ky. B. 145, 291, 1909.
 Kohler, Iowa Agric., Nov. 1905, 82.
 Patterson, Farm. Guide, Apr. 24, 1909, 2.
 Popenoe, Kans. Farm., June 13, 1907, 705.

Corn insects (*Cont'd*)

- Sanderson, U. S. B. 57, 1906.
 Sherman, N. C. Dept. Agr. B. 26, 5, '05.
 Sherman, N. C. Dept. Agr. B. Oct. 1910, 68.
 Sherman, N. C. Dept. Agr. B. 35, 5, '14.
 Stedman, Mo. Bd. Agr. R. 38, 242, '06.
 Surface, Pa. D. A. Zoöl. I, 1, 27, 1911.
 Surface, Pa. D. A. Zoöl. II, 5, 87, 1912.
 Troop, Farm. Guide, Aug. 10, 1912, 11.
 Weed, Nat'l Stockm. & Farm., May 30, 1912, 4.
- Cornifrons elautalis**
 Hunter, Pratt & Mitchell, U. S. B. 113, 35, 1912.
- Corn leaf-aphis**, *see* **Aphis maidis**
- Corn root aphis**, *see* **Aphis maidi-radicis**
- Corn-root webworm**, *see* **Crambus caliginosellus**
- Corn sap-beetle**, *see* **Carpophilus pallipennis**
- Corn-stalk borer**, *see* **Diatraea zeacolella**
- Corthylus columbianus**
 Hopkins, U. S. B. 58, 61, 1909.
- Corthylus punctatissimus**
 Felt, N. Y. St. Mus. Mem. 8, 65, 1905.
 Felt, J. Ec. Ent. VI, 427, 1913.
- Corticaria ferruginea**
 Patch, Me. B. 162, 362, 1908.
- Coruna sp.**
 Herrick & Hungate, N. Y. C. B. 300, 736, 1911.
- Corymbites aeripennis**
 Criddle, J. Ec. Ent. IV, 238, 1911.
- Corymbites caricinus**
 Slingerland & Crosby, Man. Fr. Ins. 55, 1914.
- Corymbites cylindriciformis**
 Slingerland & Crosby, Man. Fr. Ins. 55, 1914.
- Corymbites hieroglyphicus**
 Felt, N. Y. St. Mus. Mem. 8, 692, 1906.
- Corymbites inflatus**
 Venables, Pr. Ent. Soc. B. C. 1, 9, 1911.
- Corymbites propola**
 Felt, N. Y. St. Mus. Mem. 8, 692, 1906.
- Corymbites tarsalis**
 Slingerland & Crosby, Man. Fr. Ins. 55, 1914.
- Corythuca arcuata**
 Felt, N. Y. St. Mus. Mem. 8, 598, 1906.
 Gibson, Ont. Ent. Soc. R. 41, 15, 1911.

Corythuca ciliata

- Felt, N. Y. St. Mus. Mem. 8, 599, 1906.
 Weiss, J. Ec. Ent. VI, 407, 1913.
- Corythuca pergandei**
 Patch, Me. B. 134, 222, 1906.
- Corythuca sp.**
 Douglass, Ind. Ent. R. 3, 215, 1910.
- Corythuca sp. on apple**
 Wilson, Oreg. Bien. Crop Pest R. f., 1911-1912, 152.
- Cosmopepla carnifex**
 Nash, Ont. Ent. Soc. R. 38, 24, 1908.
 Nash, Ont. Ent. Soc. R. 40, 15, 1910.
 Patch, Me. B. 134, 214, 1906.
 Patch, Me. B. 148, 276, 1907.
 ——— U. S. Y. B., 1906, 511.
- Cosmophila erosa**
 Chittenden, U. S. B. 126, 5, 1913.
- Cossonus platalea**
 Felt, N. Y. St. Mus. Mem. 8, 455, 1906.
- Cossus centerensis**
 Felt, N. Y. St. Mus. Mem. 8, 476, 1906.
- Cossus in live oak**
 Doane, J. Ec. Ent. V, 347, 1912.
- Cossus sp.**
 Surface, Pa. D. A. Zoöl. I, 4, 171, 1911.
- Cotalpa consobrina**
 Morrill, Ariz. Comm. Agr. & Hort. R. 6, 46, 1914.
- Cotalpa lanigera**
 Gossard, Ohio B. 233, 148, 1911.
- Cotton aphis**, *see* **Aphis gossypii**
- Cotton-boll cutworm**, *see* **Prodenia ornithogalli**
- Cotton boll weevil**, *see* **Anthonomus grandis**
- Cotton bollworm**, *see* **Heliothis obsoleta**
- Cotton insects**
 Clay, Tex. Agr. & Statis. R. 1905, 266.
 Morrill, S. W. Stockm., Jan. 16, '14, 18.
 Sherman, N. C. Dept. Agr. B. June 1908, 8.
 Sherman, N. C. Dept. Agr. B. Oct. 1910, 68.
- Cotton leaf-bug**, *see* **Calocoris rapidus**
- Cotton leafhopper**, *see* **Aulacizes and Oncometopia**
- Cotton moth**, *see* **Alabama argillacea**
- Cotton root louse**, *see* **Aphis maidi-radicis**
- Cotton square-borer**, *see* **Uranotes melinus**
- Cotton stainer**, *see* **Dysdercus suturellus**
- Cottonwood-borer**, *see* **Plectrodera scaltor**

Cottonwood insects

Clay, Tex. Agr. & Statis. R. 1905, 268.

Cottonwood scale, see Chionaspis orthobis

Cotton worm, see Alabama argillacea

Cottony cushion scale, see Icerya purchasi

Cottony maple scale, see Pulvinaria vitis

Coulee cricket, see Peranabrus scabricollis

Cowpea aphid, see Aphis medicaginis

Cowpea curculio, see Chalcodermus aeneus

Cowpea weevil, see Bruchus chinensis

Crab louse, see Phthirus inguinalis

Crabro ro-maculatus

Hine, La. Crop Pest Comm. C. 6, 27, '06.

Crambus caliginosellus

Dean, Kans. Agr. Educ. I, 4, 13, 1909.

Felt, N. Y. R. 21, 75, 1906.

Felt, N. Y. R. 27, 118, 1912.

Gossard, Ohio B. 198, 35, 38, 1908.

Gossard, Ohio B. 233, 73, 1911.

Howard, U. S. R. Ent., 1911, 14.

Howard, U. S. R. Ent., 1912, 15.

Hunter, U. S. Y. B., 1911, 205.

Morgan, U. S. Y. B., 1910, 291.

Runner, U. S. D. A. B. 78, 1, 1914.

Sanborn, Okla. B. 100, 32, 1912.

Sanderson, Ins. Pests, 161, 224, 1912.

Sherman, N. C. Dept. Agr. B. 26, 5, '05.

Sherman, N. C. Dept. Agr. B. 35, 5, 24, 1914.

Stedman, Mo. Bd. Agr. R. 38, 268, '06.

Symons, Md. B. 101, 170, 1905.

Crambus exsiccatas

Tucker, Kans. Farm., Nov. 2, '05, 1112.

Crambus hortuellus

Felt, N. Y. R. 21, 77, 1906.

Franklin, Mass. B. 115, 14, 1907.

Franklin, Mass. B. 126, 7, 1908.

Franklin, Mass. R. 25, I, 233, 1913.

Hardenburg & Malde, Wis. Cran. Grow. Assoc., 21st Meet., 12, 1908.

O'Kane, Inj. Ins. 231, 1914.

Slingerland & Crosby, Man. Fr. Ins. 468, 1914.

Crambus laqueatellus

Felt, N. Y. R. 21, 77, 1906.

Crambus luteolellus

Felt, N. Y. R. 21, 75, 1906.

Gossard, Ohio B. 233, 73, 1911.

Crambus mutabilis

Felt, N. Y. R. 21, 74, 1906.

Crambus pascuellus

Smith, Ga. Bd. Ent. B. 20, 170, 1906.

Smith & Lewis, U. S. B. 60, 81, 1906.

Crambus sp.

Felt, C. Gentl., 1906, 612.

Forbes, Ill. Ent. R. 23, 38, 1905.

Hughes, Iowa, B. 137, 71, 1913.

O'Kane, Inj. Ins. 112, 1914.

——— U. S. Y. B., 1907, 543.

——— U. S. Y. B., 1908, 568.

Crambus trisectus

Felt, N. Y. R. 21, 73, 1906.

Gossard, J. Ec. Ent. IV, 207, 1911.

Crambus vulgivagellus

Felt, N. Y. R. 21, 71, 1906.

Felt, U. S. B. 60, 89, 1906.

Crambus zeellus

Felt, N. Y. R. 21, 76, 1906.

Pettit, Mich. B. 233, 203, 1906.

Cranberry fruit-worm, see Mineola vac-cinii

Cranberry girdler, see Crambus hortuellus

Cranberry insects

Franklin, Ent. News, 1907, 17.

Franklin, Mass. B. 115, 1907.

Franklin, Mass. B. 126, 1908.

Franklin & Morse, Mass. B. 150, 49, '14.

Hardenburg & Malde, Wis. R. 24, 311, '07.

Hardenburg & Malde, Wis. Cramb.

Grow. Assoc., 21st Meet., 10, 1908.

Hardenburg, Wis. B. 159, 1908.

Malde, Wis. Cranb. Grow. Assoc., 20th Meet., 5, 1907.

Smith, N. J. R., 1904, 574, 1905.

Smith, N. J. R., 1905, 563.

Smith, N. J. R., 1908, 339.

Smith, N. J. R., 1911, 437.

Whitson, Wis. R. 23, 149, 1906.

Cranberry looper, see Xanthotype croc-ataria

Cranberry scale, see Aspidiotus ancylus

Cranberry snout-beetle

Hardenburg & Malde, Wis. Cranb.

Grow. Assoc., 21st Meet., 13, 1908.

Cranberry spanworm, see Cleora pamp-inaria

Cranberry toad bug, see Phylloscelis atra

Craponius inaequalis

Brooks, W. Va. R. f. 1904-1905, 14.

Brooks, W. Va. B. 100, 213, 1906.

Dean & Peairs, Kans. Agr. Educ. VI, 2, 103, 1913.

Craponius inaequalis (*Cont'd*)

Ehrhorn, Pac. Rur. Press LXXVI, 404, 1908.

Funk, Pa. Dept. Agr. B. 152, 305, 1907.

Gossard, Ohio B. 233, 136, 1911.

Johnson & Hammar, U. S. B. 116, 26, 1912.

O'Kane, Inj. Ins. 335, 1914.

Pierce, U. S. B. 100, 79, 1912.

Quaintance & Shear, U. S. F. B. 284, 16, 1907.

Rumsey, W. Va. Hort. Soc. 14th R. 32, 1907.

Rumsey & Brooks, W. Va. R. f. 1905-1906, 25

Sanderson, Ins. Pests, 534, 1912.

Sill, Pa. Dept. Agr. B. 217, 53, 1912.

Slingerland & Crosby, Man. Fr. Ins. 440, 1914.

——— U. S. Y. B., 1905, 633.

——— U. S. Y. B., 1906, 513.

Cratoparis lunatus

Felt, N. Y. St. Mus. Mem. 8, 499, 1906.

Cremastochilus knochii

Forbes, Ill. Ent. R. 23, 183, 1905.

Cremastogaster bicolor

Jenne, U. S. B. 80, 30, 1909.

Cremastogaster lineolata

Hammar, U. S. B. 80, 110, 1910.

Hunter & Pierce, U. S. B. 114, 139, 1912.

Pierce, U. S. B. 100, 69, 1912.

Vickery, U. S. B. 85, 115, 1910.

Cremastogaster lineolata laeviuscula

Wildermuth, U. S. D. A. B. 124, 26, '14.

Creolin-Pearson

——— U. S. D. A. Ins. & Fung. Bd. Ins. 5, p. 67, 1914.

Creolium

——— U. S. D. A. Ins. & Fung. Bd. Ins. 1, p. 17, 1914.

Creolusul

——— U. S. D. A. Ins. & Fung. No. 35, 1913.

Creosote dip label

——— U. S. D. A. Ins. & Fung. Bd. Ins. 2, p. 27, 1914.

Crepidodera cucumeris, *see* **Epitrix****Crepidodera helxines**

Garman, Ky. B. 120, 61, 1905.

Slingerland & Crosby, Man. Fr. Ins. 205, 1914.

Crepidodera rufipes

Burgess, U. S. B. 52, 53, 1905.

Cotton, Ohio Nurs. Orch. Insp. B. 7 21, 1906.

Felt, N. Y. St. Mus. Mem. 8, 556, 1906.

Slingerland & Crosby, Man. Fr. Ins. 205, 1914.

Smith, N. J. R., 1906, 524.

Surface, Pa. Dept. Agr. R. 17, 162, 1911.

Cresogent

U. S. D. A. Ins. & Fung. Bd. Ins. 6, p. 89, 1914.

Cressonia juglandis

Felt, N. Y. St. Mus. Mem. 8, 518, 1906.

Howard, U. S. B. 54, 80, 1905.

——— U. S. Y. B., 1907, 549.

——— U. S. Y. B., 1908, 579.

Crinkly flannel moth, *see* **Lagoa crispata****Criocephalus agrestis**

Felt, N. Y. St. Mus. Mem. 8, 659, 1906.

Crioceris asparagi

Bethune, Ont. Agr. Coll. R. 32, 46, 1907.

Bethune, Ont. Agr. Coll. B. 171, 10, '09.

Chittenden, U. S. B. 66, 6, 1907.

Chittenden, Ins. Inj. Veg. 93, 1907.

Chittenden, U. S. C. 102, 2, 1908.

Chittenden, U. S. B. 66, 93, 1909.

Criddle, Nor'-West Farm., Dec. 20, 1912, 1595.

Davis, J. Ec. Ent. III, 180, 1910.

Davis, Ill. Ent. R. 26, 102, 1911.

Essig, Cal. Hort. B. II, 1-2, 226, 1913.

Fernald, Mass. C. 23, 1909.

Fletcher, Can. Exp. Farms B. 52, 44, '05.

Fletcher, Ont. Ent. Soc. R. 37, 82, 1907.

Fulton, Wright & Gregg, Pa. B. 110, 18, 1911.

Gibson, Can. Hort. XXXIII, 118, 1910.

Howard, U. S. B. 54, 83, 1905.

Hulsart, Rur. N. Y., 1907, 569.

Jarvis, Ont. Ent. Soc. R. 37, 47, 1907.

Jarvis, Conn. Storrs, B. 56, 244, 1909.

Lochhead, Syn. Ec. Ent. 75, 1914.

Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 4, 1906.

Morris, Ont. Ent. Soc. R. 41, 17, 1911.

Nicholson, Farm & Dairy, Can., Aug. 19, 1909, 8.

O'Kane, Inj. Ins. 152, 1914.

Pettit, Mich. B. 233, 155, 1906.

Prescott, Rur. N. Y., 1907, 587.

Sanderson, Ins. Pests, 424, 1912.

- Smith, N. C. B. 197, 9, 1908.
 Smith, N. J. R., 1908, 331.
 Smith, N. J. Bd. Agr. R. 37, 185, 1910.
 Smith, N. J. R., 1911, 412.
 Surface, Pa. D. A. Zoöl. IV, 1, 6, 1906.
 Surface, Pa. D. A. Zoöl. I, 1, 19, 1911.
 Surface, Pa. D. A. Zoöl. I, 4, 189, 1911.
 Symons, Md. B. 101, 189, 1905.
 Symons & Gahan, Md. Hort. Soc., 1904, 37, 1905.
 ——— C. Gentl., 1909, 997.
 ——— Rur. N. Y., 1907, 256.
 ——— Rur. N. Y., 1913, 873.
 ——— U. S. Y. B., 1905, 629.
 ——— U. S. Y. B., 1906, 510.
 ——— U. S. Y. B., 1907, 543.
 ——— U. S. Y. B., 1908, 570.
- Crioceris duodecimpunctatus**
 Bethune, Ont. Agr. Coll. R. 32, 46, '07.
 Bethune, Ont. Agr. Coll. B. 171, 10, '09.
 Chittenden, Ins. Inj. Veg. 96, 1907.
 Chittenden, U. S. B. 66, 9, 1907.
 Chittenden, U. S. C. 102, 9, 1908.
 Criddle, Nor'-West Farm., Dec. 20, 1912, 1595.
 Felt, N. Y. R. 22, 53, 1907.
 Fernald, J. Ec. Ent. V, 246, 1912.
 Fernald, Mass. R. 22, II, 72, 1910.
 Fernald, Mass. R. 24, I, 82, 1912.
 Fink, N. Y. C. B. 331, 422, 1913.
 Fletcher, Can. Exp. Farms B. 52, 44, '05.
 Jarvis, Ont. Ent. Soc. R. 37, 47, 1907.
 Lochhead, Syn. Ec. Ent. 75, 1914.
 Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 4, 1906.
 Morris, Ont. Ent. Soc. R. 41, 17, 1911.
 O'Kane, Inj. Ins. 154, 1914.
 Sanderson, Ins. Pests, 427, 1912.
 Smith, N. C. B. 197, 9, 1908.
 Smith, N. J. Bd. Agr. R. 37, 186, 1910.
 Smith, N. J. R., 1911, 412.
 Symons, Md. B. 101, 189, 1905.
- Crioceris sp.**
 Barre & Conradi, S. C. B. 141, 26, 1909.
 Felt, Gard. Mag., June 1905, 234.
 Price, Va. C. 7, 52, 1909.
 Surface, Pa. D. A. Zoöl. V, 12, 372, '08.
 Work, Am. Agric., June 29, 1912, 796.
- Crocigrapha normani**
 Johannsen & Patch, Me. Comm. Agr. R. f., 1910, 345.
 Patch, Me. B. 162, 356, 1908.
- Croesus latitarsus**
 Johannsen & Patch, Me. B. 195, 242, '11.
 Patch, Me. B. 148, 272, 1907.
- Crossocosmia flavoscutellata**
 Howard & Fiske, U. S. B. 91, 234, 1911.
- Crossocosmia sericariae**
 Howard & Fiske, U. S. B. 91, 232, 1911.
- Cross-striped cabbage worm, see Everges-tis rimosalis**
- Croton bug, see Blattella germanica**
- Crown animal spray**
 U. S. D. A. Ins. & Fung. No. 70, 1913.
- Crude oil**
 Davis, Rur. N. Y., 1905, 246.
 Garman, Ky. B. 147, 15, 1910.
 Jarvis, Conn. Storrs B. 54, 188, 1908.
 Melander, Northw. Hort., Nov. '13, 268.
 Melander, Better Fr., Oct. 1914, 19.
 Price, U. S. B. An. Ind. C. 89, 1, 1905.
 Smith, N. J. Ent. C. 22.
 Smith, N. J. R., 1906, 600.
 Smith, N. J. B. 213, 18, 1908.
- Cryphalus striatulus**
 Felt, N. Y. St. Mus. Mem. 8, 673, 1906
- Cryptarcha concinna**
 Felt, N. Y. St. Mus. Mem. 8, 491, 1906.
- Cryptocephalus obsoletus**
 Newell & Smith. U. S. B. 52, 72, 1905.
- Cryptocephalus quadrimaculatus**
 Felt, N. Y. St. Mus. Mem. 8, 695, 1906.
- Cryptocephalus schreibersii**
 Felt, N. Y. St. Mus. Mem. 8, 695, 1906.
- Cryptochaetum iceryae**
 Essig, Cal. Hort. B. II, 1-2, 250, 1913.
 Quayle, Cal. B. 214, 472, 1911.
 Quayle, J. Ec. Ent. IV, 513, 1911.
- Cryptococcus fagi**
 Braucher, Can. Ent., 1914, 14.
 Hewitt, Can. Ent., 1914, 15.
- Cryptognatha flavescens**
 Woglum, U. S. B. 120, 38, 1913.
- Cryptogonus orbiculus**
 Essig, Pom. Jr. Ent. III, 390, 1911.
 Essig, Cal. Hort. B. II, 1-2, 213, 1913.
 Essig, Cal. Hort. B. III, 3, 129, 1914.
 Cal. Fr. Grow., July 23, 1910, 4.
- Cryptolaemus montrouzieri**
 Austin, Cal. Hort. Comm. C., Nov. 1905, 11.
 Bremner, Cal. Hort. Comm. Dept. Ins. 32, 1910.

Cryptolaemus montrouzieri (*Cont'd*)

Carnes, Claremont (Cal.) Pom. Club B.
1, 13, 1909.

Essig, Pom. Jr. Ent. II, 263, 1910.

Essig, Cal. Hort. B. II, 1-2, 214, 1913.

Essig, Cal. Hort. B. III, 3, 127, 1914.

Garrett, La. R. 21, 22, 1909.

Garrett, La. B. 121, 15, 1910.

Howard, U. S. R. Ent., 1912, 16.

Isaac, Bug vs. Bug, 14, 1906.

Quayle, Cal. B. 214, 484, 1911.

Quayle, J. Ec. Ent. IV, 514, 1911.

——— La. Plant., Sept. 24, 1910,
206.

Cryptorhynchus lapathi

Britton, Conn. R. 7, 335, 1908.

Brues, Wis. R. 22, 324, 1905.

Burgess, U. S. B. 60, 74, 1906.

Cosens, Ont. Ent. Soc. R. 42, 15, 1912.

Davis, J. Ec. Ent. III, 184, 1910.

Felt, N. Y. St. Mus. Mem. 8, 100, 1905.

Felt, C. Gentl., 1907, 660.

Forbes, Ill. B. 151, 502, 1911.

Forbes, Ill. Ent. R. 26, 40, 1911.

Johannsen & Patch, Me. B. 195, 233, '11.

Moore, Wis. R. 23, 237, 1906.

Osborn, U. S. B. 52, 9, 1905.

Patch, Me. B. 162, 363, 1908.

Sanders, Wis. B. 227, 24, 1912.

Schoene, N. Y. St. B. 286, 85, 1907.

Schoene, U. S. B. 67, 27, 1907.

Stene, R. I. Nurs. Insp. 21, 1906.

Stene, R. I. Bd. Agr. R. 21, 37, 1906.

Washburn, U. S. B. 52, 56, 1905.

——— U. S. Y. B., 1906, 514.

——— U. S. Y. B., 1907, 550.

——— U. S. Y. B., 1908, 578.

Cryptorhynchus mangiferae

Howard, U. S. R. Ent., 1911, 32.

Marlatt, Fla. Fr. Prod. News, July 1,
1910, 2.

Marlatt, U. S. C. 141, 1, 1911.

Cryptorhynchus mangiferae, Legislation

Fla. Dept. Agr. Quart. B. 4, vol. 22, 44,
1912.

Cryptothrips floridensis

Watson, Fla. R., 1913, lxxvii.

Watson, J. Ec. Ent. VI, 413, 1913.

Crypturgus atomus

Felt, N. Y. St. Mus. Mem. 8, 359, 1906.

Cryptus extrematis

Hitchings, Me. Ent. R. 3, 12, 1908.

Ctenophora angustipennis

Lovett, Oreg. Bien. Crop Pest R. f.,
1913-1914, 166.

Ctenophora apicata

Johannsen, Me. B. 177, 32, 1910.

Ctenocephalus canis

Diets, Ind. Ent. R. 5, 168, 1912.

Doane, Ins. Disease, 154, 1910.

Felt, N. Y. St. Mus. B. 129, 19, 1909.

Felt, N. Y. St. Mus. B. 136, 26, 1912.

Fox, Pub. Health Mar. Hosp. Serv. B
30, 143, 1910.

Herrick, Household Ins. 146, 1914.

Lochhead, Syn. Ec. Ent. 96, 1914.

Mitzmain, Ent. News, 1908, 355.

O'Kane, Inj. Ins. 354, 1914.

Skinner, J. Ec. Ent. II, 192, 1909.

Smith, N. J. B. 203, 22, 1907.

Surface, Pa. D. A. Zoöl. III, 1, 21, 1913.

Swenk, Nebr. Bd. Agr. R. f. 1910, 369.

Washburn, Minn. P. B. 22, 22, 1905.

Whitmarsh, Ohio B. 253, 128, 1912.

Ctenocephalus felis

Doane, Ins. Disease, 154, 1910.

Ctenocephalus spp.

Washburn, Minn. R. 11, 72, 1906.

Ctenopsyllus musculi

Fox, Pub. Health, Mar. Hosp. Serv. B.
30, 140, 1910.

Mitzmain, Ent. News, 1908, 354.

Ctenucha virginica

Johannsen, Me. B. 207, 450, 1912.

Cuban hen flea, see Sarcopsylla gallinacea**Cucujus clavipes**

Felt, N. Y. St. Mus. Mem. 8, 489, 1906.

Cucullia convexipennis

Gibson, Ont. Ent. Soc. R. 36, 119, 1906.

Cucumber flea-beetle, see Epitrix cucumeris**Cucurbit insects**

Britton, Conn. R. 8, 805, 1909.

Surface, Pa. D. A. Zoöl. I, 1, 28, 1911.

Culex afbitchii

Felt, N. Y. R. 20, 454, 1905.

Smith, N. J. R., 1910, 422.

Culex abserratus

Felt, N. Y. R. 20, 456, 467, 1905.

Culex atropalpus

Coffin, Md. B. 109, 104, 1906.

Culex aurifer

Grossbeck, N. J. R., 1907, 558.

Smith, N. J. R., 1909, 459.

Smith, N. J. R., 1910, 422.

- Culex auroides**
Felt, N. Y. R. 20, 449, 1905.
- Culex canadensis**
Coffin, Md. B. 109, 100, 1906.
Grossbeck, N. J. R., 1906, 666.
Smith, N. J. R., 1910, 422.
- Culex cantans**
Coffin, Md. B. 109, 98, 1906.
Smith, N. J. R., 1905, 677.
- Culex cantator**
Britton, Conn. B. 173, 3, 1912.
Britton, Conn. R. 12, 259, 1913.
Britton & Viereck, Conn. R. 4, 268, '05.
Coffin, Md. B. 109, 97, 1906.
Grossbeck, N. J. R., 1907, 559.
Grossbeck, N. J. R., 1908, 415.
- Culex consobrinus**
Wellman, Jr. Amer. Med. Assoc. LV, 217, 1910.
- Culex discolor**
Coffin, Md. B. 109, 104, 1906.
Smith, N. J. R., 1905, 675.
- Culex dyari**
Grossbeck, N. J. R., 1908, 418.
- Culex fitchii**
Felt, N. Y. R. 20, 451, 1905.
Grossbeck, N. J. R., 1906, 664.
- Culex incidens**
Quayle, Cal. B. 178, 45, 1906.
- Culex jamaicensis**
Grossbeck, N. J. R., 1906, 660.
Smith, N. J. R., 1910, 423.
- Culex lativittatus**
Quayle, Cal. B. 178, 34, 1906.
- Culex melanurus**
Grossbeck, N. J. R., 1907, 558.
- Culex pallidohirta**
Smith, N. J. R., 1905, 679.
- Culex perturbans**
Coffin, Md. B. 109, 92, 1906.
Dyar, Pr. Ent. Soc. Wash. XI, 145, '09.
Grossbeck, N. J. R., 1906, 661.
Grossbeck, N. J. R., 1907, 546.
Grossbeck, Ent. News, 1908, 473.
Grossbeck, N. J. R., 1908, 416.
Sellards, Fla. R., 1905, 24.
Smith, N. J. R., 1905, 676.
Smith, Ent. News, 1908, 22.
Smith, N. J. R., 1908, 410.
Smith, N. J. R., 1910, 421.
- Culex pipiens**
Britton, Conn. R. 13, 246, 1914.
- Britton, J. Ec. Ent. VII, 257, 1914.
Britton & Viereck, Conn. R. 4, 266, '05.
Chambliss, S. C. Clemson Agr. Coll. Ext. Work, II, 5, 5, 1906.
Coffin, Md. B. 109, 88, 1906.
Davis, Ent. News, 1906, 369.
Dietz, Ind. Ent. R. 5, 160, 1912.
Felt, N. Y. St. Mus. B. 129, 16, 1909.
Felt, N. Y. St. Mus. B. 136, 23, 1912.
Headlee, N. J. C. 13, 1912.
Herrera, U. S. B. 67, 123, 1907.
Herrick, Household Ins. 55, 1914.
Howard, U. S. B. 88, 13, 1910.
Howard, U. S. F. B. 444, 10, 1911.
Lochhead, Syn. Ec. Ent. 83, 1914.
Mitchell, Mosq. Life, N. Y. 167, 1907.
Sellards, Fla. Ann. R., 1905, 23.
Smith, N. J. B. 216, 4, 1908.
Symons, Md. B. 134, 218, 1909.
Weber, Ent. News, 1906, 214.
- Culex pretans**
Britton & Viereck, Conn. R. 4, 271, 1905.
Smith, N. J. R., 1905, 684.
Smith, N. J. R., 1910, 422.
- Culex punctor**
Grossbeck, N. J. R., 1906, 666.
Smith, N. J. R., 1905, 681.
- Culex quinquefasciatus**
Howard, U. S. B. 88, 83, 1910.
Howard, U. S. F. B. 444, 10, 1911.
- Culex restuans**
Coffin, Md. B. 109, 92, 1906.
Girault, Ent. News, 1908, 4.
Smith, N. J. R., 1909, 458.
- Culex salinarius**
Coffin, Md. B. 109, 97, 1906.
Grossbeck, N. J. R., 1906, 669.
- Culex saxatilis**
Smith, N. J. R., 1905, 685.
- Culex signifer**
Grossbeck, N. J. R., 1906, 665.
Smith, N. J. R., 1905, 678.
- Culex sollicitans**
Britton, Conn. B. 173, 4, 1912.
Britton, Conn. R. 12, 259, 1913.
Britton & Viereck, Conn. R. 4, 268, '05.
Britton & Viereck, Conn. R. 5, 224, '06.
Buttrick, J. Ec. Ent. VI, 352, 1913.
Coffin, Md. B. 109, 92, 1906.
Felt, N. Y. St. Mus. B. 129, 17, 1909.
Felt, N. Y. St. Mus. B. 136, 24, 1912.
Grossbeck, N. J. R., 1908, 416.

- Headlee, N. J. C. 17.
 Hunter, J. Ec. Ent. III, 504, 1910.
 Mitchell, Mosq. Life, N. Y., 155, '07.
 Smith, Science, XXV, 729, 1907.
- Culex** sp.
 Whitmarsh, Ohio B. 253, 115, 1912.
- Culex squamiger**
 Coffin, Md. B. 109, 104, 1906.
- Culex subcantans**
 Grossbeck, N. J. R., 1908, 418.
 Smith, N. J. R., 1910, 422.
- Culex sylvestris**
 Coffin, Md. B. 109, 100, 1906.
 Grossbeck, N. J. R., 1906, 664.
 Smith, N. J. R., 1906, 678.
 Smith, N. J. R., 1910, 421.
- Culex sylvicola**
 Smith, N. J. R., 1905, 677.
- Culex taeniorhynchus**
 Coffin, Md. B. 109, 97, 1906.
 Grossbeck, N. J. R., 1908, 416.
- Culex tarsalis**
 Quayle, Cal. B. 178, 48, 1906.
 Wellman, Jr. Amer. Med. Assoc., LV, 217, 1910.
- Culex territans**
 Coffin, Md. B. 109, 105, 1906.
- Culex trichurus**
 Johannsen & Patch, Me. B. 195, 237, '11.
- Culex triseriatus**
 Grossbeck, N. J. R., 1906, 666.
- Culex trivittatus**
 Smith, N. J. R., 1910, 423.
- Culex and leprosy**
 Howard & Clark, Jr. Exper. Med., Dec. 1912, 850.
- Culicada**, *see* **Culex**
- Culicelsa**, *see* **Culex**
- Culicides**
 Berry, Pub. Health R. XXI, 83, 1906.
 Darling, Amer. Jr. Pub. Health, VIII, 89, 1912.
 Francis, Publ. Health R. XXII, pt. 1, 341, 1907.
 Houghton, Del. R. 16-17-18, 88, 1907.
 Howard, U. S. B. 88, 33, 1910.
 Smith, N. J. R., 1906, 649.
 Smith, N. J. R., 1910, 417.
- Culicides**, *steam blast*
 Berry, Milit. Surg., XX, 36, 1907.
- Currant aphid**, *see* **Myzus ribis**
- Currant borer**, *see* **Sesia tipuliformis**
- Currant-fly**, *see* **Epochra canadensis**
- Currant insects**
 Lindsley, Mich. Farm., Mar. 8, '13, 316.
 Melander, Better Fr., Dec. 1912, 15.
 Surface, Pa. D. A. Zool. I, 1, 30, 1911.
- Currant spanworm**, *see* **Cymatophora ribearia**
- Currant stem-girdler**, *see* **Janus integer**
- Currant worm**, imported, *see* **Pteronurus ribesi**
- Currant worm**, native, *see* **Pristophora grossulariae**
- Cuterebra cuniculi**
 Britton, Conn. R. 7, 338, 1908.
 Lochhead, Ont. Ent. Soc. R. 35, 33, '05.
- Cutworms**
 Balderston, C. Gentl., 1906, 694.
 Baldwin, Ind. Ent. R. 5, 132, 1912.
 Bethune, Can. Hort. XXXII, 152, 1909.
 Clarke, Cal. Fr. Grow., Aug. 13, 1910, 4.
 Cowell, Pac. Rur. Press, LXXXVIII, 57, 1914.
 Criddle, Nor'-West Farm, Dec. 20, 1907, 1157.
 Doten, Nev. B. 73½, 44, 1910.
 Eargle, Prog. Farm., Feb. 28, 1905, 2.
 Felt, C. Gentl., 1908, 608.
 Felt, C. Gentl., May 18, 1911, 482.
 Fernald, Mass. C. 2, 1907.
 Fletcher, Nor'-West Farm., July 5, 1905, 630.
 Forbes, Prai. Farm., Mar. 1, 1910, 1.
 Gahan & Weldon, Md. Hort. Soc., 1906, 124, 1907.
 Gee, Prog. Farm., 1912, 85.
 Gibson, Can. Exp. Farms Ent., B. 3, 11, 1912.
 Gossard, O. Farm., Mar. 11, 1911, p. 316.
 Gossard, O. Farm., June 10, 1911, p. 686.
 Gossard, O. Farm., June 22, 1912, p. 738.
 Gossard, O. Farm., Apr. 12, 1913, 531.
 Hartman, Rur. N. Y., 1912, 435.
 Haseman, Mo. Bd. Agr. R. 44, 276, 1912.
 Headlee, N. J. C. 26, 6, 1914.
 Herrick, Rur. N. Y., 1912, 619.
 Hulsart, Rur. N. Y., 1911, 703.
 Isaac, Cal. Cult. XXVIII, 570, 1907.
 Jarvis, Can. Hort. XXIX, 175, 1906.
 Johnson, Farm. Guide, May 18, 1907, 6.
 Johnson, Nebr. Farm., June 12, '07, 539.

- Lewis, Pr. Ga. Hort. Soc., 1912, 10.
 Lochhead, Syn. Ec. Ent. 60, 1914.
 Menges, Pa. Dept. Agr. B. 238, 114, 1913.
 Menges, Pa. R. 18, 414, 1914.
 Middleton, Pr. Ent. Soc. B. C. 3, 36, '13.
 Morrill, S. W. Stockm., May 22, 1914, 9.
 Mulcahy, Farm & Fireside, Dec. 15, 1905, 6.
 Newell, La. Hort. Soc. 1908, 51.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 117, 1909.
 Popenoe, Kans. Farm., July 12, 1906, 724.
 Reed, Ga. Hort. Soc. f., 1914, 58.
 Russell, Wis. B. 240, 43, 1914.
 Sanders, C. Gentl., 1910, 603.
 Sanderson, Ins. Pests, 84, 1912.
 Smith, Ga. Bd. Ent. B. 16, 44, 1905.
 Smith, N. J. B. 229, 12, 1910.
 Smith, N. J. R., 1911, 410.
 Severin, S. D. Hort. Soc. 9th R. 92, 120, 1912.
 Severin, S. D. Hort. Soc. 11th R. 47, '14.
 Sherman, Prog. Farm., Feb. 14, 1905, 2.
 Stedman, Col. Rur. World, Feb. 3, 1909, 35.
 Surface, Pa. D. A. Zoöl. II, 11 & 12, 328, 1905.
 Surface, Pa. D. A. Zoöl. V, 12, 377, '08.
 Swenk, Nebr. Bd. Agr. R. f. 1908, 292.
 Swenk, Nebr. Ent. B. 1, 22, 1913.
 Taft, Nat'l Fr. Grow., June 1908, 13.
 Thomas, Rur. N. Y., 1911, 389.
 Titus, Deseret Farm., June 8, 1912, 831.
 Troop, Ind. Farm., Apr. 6, 1912, 19.
 Waldron, Farm & Dairy, Can., July 2, 1914, 9.
 Waldron, Farm & Ranch, Apr. 11, 1914, 12.
 Warner, Farm. Advocate, Can., 1906, 941.
 Washburn, Farm & Dairy, Can., June 8, 1911, 8.
 Washburn, Minn. R. 14, 48, 1912.
 Watson, Fla. B. 125, 1914, 66.
 Webster, U. S. Y. B., 1908, 378.
 Weed, Or. Judd Farm., May 31, 1913, 778.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 164.
 ——— Rur. N. Y., 1912, 90, 583.
- Cutworms in alfalfa**
 Morrill, S. W. Stockm., May 26, 1911, 1.
 Tucker, Kans. Farm., May 18, '05, 526.
- Cutworms in beets**
 Pettit, Mich. B. 244, 204, 1907.
- Cutworms in cabbage.**
 Sherman, N. C. Dept. Agr. B. July, 1911, 12.
 Sherman, N. C. Dept. Agr. B. 32, 7, 12, 1911.
- Cutworms in cantaloupes**
 Leach, Mass. Bd. Agr. C. 15, 9, 1914.
- Cutworms in corn**
 Dean, Kans. Agr. Educ. I, 4, 12, 1909.
 Felt, C. Gentl., 1910, 107.
 Garman, Ky. B. 145, 294, 1909.
 Lillie, Mich. Farm., Mar. 25, 1911, 347.
 Pettit, Mich. B. 233, 208, 1906.
 Pettit, Mich. B. 258, 294, 1910.
 Popenoe, Kans. Farm., June 13, 1907, 706.
 Sherman, N. C. Dept. Agr. B. 26, 5, 11, 1905.
 Sherman, N. C. Dept. Agr. B. 35, 5, 15, 1914.
 Swenk, Nebr. Farm., Apr. 2, '13, 434.
 ——— Ind. Farm., Aug. 26, 1911, 3.
- Cutworms in cotton**
 Sherman, N. C. Dept. Agr. B. 29, 6, 9, 1908.
- Cutworms in cucurbits**
 Smith, N. C. B. 205, 4, 1910.
- Cutworms in gardens**
 Conradi, Tex. B. 89, 15, 1907.
 Fletcher, Can. Exp. Farms B. 52, 20, 1905.
 Johnson, Colo. Fr. Grow., May '07, 4.
 Lovett, Ore. Coll. B. 91, 3, 1913.
 Smith, N. C. B. 197, 11, 1908.
- Cutworms in greenhouses**
 Fernald, Mass. Crop R. f., Oct. '07, 30.
 Fernald, Mass. Bd. Agr. R. 55, 386, '08.
- Cutworms in orchard**
 Hutchins, Mich. Farm., May 25, 1912, 604.
- Cutworms in sugar beets**
 Titus, Deseret Farm., Mar. 28, '08, 6.
- Cutworms in tobacco**
 Britton, Conn. R. 6, 264, 1907.
 Jenkins, Conn. B. 180, 44, 1914.
 Johnson, Wis. B. 237, 31, 1914.
 Morgan, U. S. C. 123, 2, 1910.

- Morgan, U. S. Y. B., 1910, 283.
 Morgan, Tenn. B. 93, 104, 1911.
- Cutworms in vineyard**
 Bioletti, Cal. Cult. XL, 551, 1913.
 Pac. Rur. Press LXXVII, 336, 1909.
- Cyanide**
 Gossard, J. Ec. Ent. I, 190, 1908.
 Woglum, J. Ec. Ent. I, 348, 1908.
- Cyanide injury**
 Quayle, Cal. Cult. XLIII, 364, 1914.
- Cyclocephala immaculata**
 Forbes, Ill. B. 116, 449, 1907.
 Titus, U. S. B. 54, 14, 1905.
- Cyclocephala villosa**
 Swenk, J. Ec. Ent. IV, 285, 1911.
- Cycloneda**, *see* *Coccinella*
- Cyclotophrys anser**
 Howard & Fiske, U. S. B. 91, 304, 1911.
- Cydia nigricans**
 Bethune, Ont. Agr. Coll. B. 171, 30, '09.
 Bethune, Ont. Ent. Soc. R. 39, 131, '09.
 Chittenden, Ins. Inj. Veg. 111, 1907.
 Fletcher, Can. Exp. Farms B. 52, 22, '05.
 Lochhead, Syn. Ec. Ent. 56, 1914.
 O'Kane, Inj. Ins. 217, 1914.
 Sanderson, Ins. Pests, 328, 1912.
 Treherne, Ont. Ent. Soc. R. 42, 24, '12.
- Cydia pomonella**, *see* *Carpocapsa*
- Cydia pseudotsugana**
 Cooley, Mont. B. 70, 125, 1908.
 ——— U. S. Y. B., 1908, 575.
- Cylas formicarius**
 Barre & Conradi, S. C. B. 141, 49, '09.
 Chittenden, Ins. Inj. Veg. 235, 1907.
 Chittenden, U. S. B. 82, 90, 1911.
 Conradi, Farm & Ranch, Jan. 14, '05, 10.
 Conradi, U. S. B. 52, 66, 1905.
 Conradi, Tex. B. 89, 37, 1907.
 Conradi, Tex. B. 93, 4, 1907.
 Ehrhorn, Pac. Rur. Press LXXVI, 388, 1908.
 Evans, Farm & Ranch, June 3, '11, 10.
 Kone, Tex. Stockm. Farm., May 11, 1910, 3.
 Maskew, Cal. Hort. B. II, 5, 535, 1913.
 Newell, Tex. Stockm. Farm., Nov. 9, 1910, 1.
 Newell, Farm & Ranch, May 30, '11, 9.
 Newell & Rosenfeld, J. Ec. Ent. I, 153, 1908.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 104, 1909.
- O'Kane, Inj. Ins. 117, 1914.
 Sanderson, Ins. Pests, 438, 1912.
 Scholl, Tex. Stockm. Farm., May 3, 1911, 13.
 ——— U. S. Y. B., 1905, 630.
 ——— U. S. Y. B., 1907, 545.
 ——— U. S. Y. B., 1908, 572.
- Cyllene caryae**
 Douglass, Ind. Ent. R. 4, 112, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 264, 1905.
 Gossard, Fla. B. 79, 311, 1905.
 Webb, U. S. Y. B., 1910, 349.
- Cyllene pictus**, *see* *C. caryae*
- Cyllene robiniae**
 Britton, Conn. R. 11, 345, 1912.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 8, 1906.
 Douglass, Ind. Ent. R. 4, 111, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 93, 1905.
 Forbes, Ill. B. 151, 510, 1911.
 Forbes, Ill. Ent. R. 26, 48, 1911.
 Gillette, Colo. Fr. Grow., Apr. 1907, 4.
 Gillette, Colo. P. B. 32, 1907.
 Gillette, Colo. R. 26, 10, 1913.
 Hopkins, U. S. B. 58, 1, 1906.
 Hopkins, Pr. Ent. Soc. Wash. IX, 44, 1907.
 Hopkins, U. S. B. 58, 31, 1907.
 Hopkins, U. S. Y. B., 1907, 164.
 Hopkins, U. S. B. 58, 61, 1909.
 Hopkins, U. S. C. 126, 2, 1910.
 Hopkins, U. S. C. 83, 1, 1907.
 Houser, Ohio B. 194, 195, 1908.
 Johnson, Colo. Fr. Grow., Mar. 1909, 23.
 Johnson, Col. Rur. World, Nov. 30, 1911, 378.
 Popenoe, Kans. Farm., Aug. 9, 1906, 820.
 Severin, S. D. Hort. Soc. 7th R. 123, '10.
 Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
 Washburn, Minn. R. 12, 95, 1908.
 Webb, U. S. Y. B., 1910, 347.
 Woodbury, Ind. Bd. Agr. R. 56, 470, 1907.
 ——— C. Gentl., 1905, 884.
 ——— U. S. Y. B., 1905, 632.
 ——— U. S. Y. B., 1907, 549.
- Cymatodera balteata**
 Forbes, Ill. Ent. R. 24, 129, 1908.
- Cymatophora inceptata**
 Hardenburg, Wis. B. 159, 18, 1908.

Cymatophora ribearia

- Britton, Conn. R. 10, 710, 1911.
 Chandler, Mo. B. 102, 264, 1912.
 Cooley, Mont. B. 64, 41, 1906.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 108, 1913.
 Gossard, Ohio B. 198, 71, 1908.
 Hitchings, Me. Ent. R. 5, 5, 1910.
 Lochhead, Ont. Ent. Soc. R. 40, 1910.
 Lochhead, Syn. Ec. Ent. 60, 1914.
 O'Kane, Inj. Ins. 282, 1914.
 Sanderson, Ins. Pests, 488, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 345, 1914.
 Swaine, Ont. Ent. Soc. R. 41, 95, 1911.

Cymatophora sulphurea

- Franklin, Ent. News, 1907, 17.
 Hardenburg, Wis. B. 159, 18, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 464, 1914.

Cynips decidua

- Felt, N. Y. St. Mus. Mem. 8, 627, 1906.

Cynips poculum

- Stewart, N. Y. St. B. 328, 363, 1910.

Cynips prinoides

- Felt, N. Y. St. Mus. Mem. 8, 627, 1906.

Cynips strobilana

- Felt, N. Y. St. Mus. Mem. 8, 625, 1906.

Cypress bark-beetle, see Phloeosinus cupressi**Cypress moth, see Argyresthia cupressella****Cyrtolobus fenestratus**

- Felt, N. Y. St. Mus. Mem. 8, 597, 1906.

Cytodites nudus

- Marsh, U. S. F. B. 390, 39, 1910.
 Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 111, 1911.

Dactylopius citri, see Pseudococcus**Dactylopius confusus**

- Hunter, Pratt & Mitchell, U. S. B. 113, 23, 1912.

Dactylopius longispinus, see Pseudococcus**Dactylopius tomentosus**

- Hunter, Pratt & Mitchell, U. S. B. 113, 25, 1912.

Dactylopius trifolii, see Pseudococcus**Dacus cucurbitae**

- Bremner, Cal. Hort. Comm. Fruit Fly, 6, 1911.
 Compere, Rur. Calif., Jan. 1911, 5.
 Compere, Cal. Hort. B. 1, 12, 909, 1912.

- Marlatt, U. S. Fed. Hort. Bd. R. 4, '14.
 Severin, Ann. Ent. Soc. Am. VII, 177, 1914.

- Severin, Can. Ent., 1914, 245.

- Weinland, Cal. Hort. B. I, 5, 156, 1912.

- U. S. Fed. Hort. Bd. Mar. 25, '14.

Dacus cucurbitae, quarantine

- Cook, Cal. Hort. Comm. Statutes, '12, 25.

Dacus oleae

- Marlatt, U. S. Fed. Hort. Bd. R. 8, '14.

- Quayle, U. S. D. A. B. 134, 27, 1914.

- Severin, Can. Ent., 1914, 277.

Dakrumba coccidivora, see Laetilia**Dalcerides ingenua**

- U. S. Y. B., 1906, 515.

Darapsa myron

- Bethune, Ont. Agr. Coll. B. 158, 29, '07.

- Forbes, Ill. Ent. R. 23, 167, 1905.

Daremma catalpae, see Ceratonia**Dargida procinctus**

- Gibson, Can. Exp. Farms Ent. B. 3, 25, 1912.

- Lovett, Oreg. Bien. Crop Pest R. f. 1913-1914, 147.

Dark meal-worm, see Tenebrio obscurus**Dark-red turpentine-beetle, see Dendroctonus valens****Dark-sided cutworm, see Euxoa messoria****Dasychira pudibunda**

- Marlatt, J. Ec. Ent. V, 76, 1912.

- Smith, N. J. R., 1910, 344.

Dasyneura grossulariae

- Gossard, Ohio B. 198, 73, 1908.

- Gossard, Ohio Hort. Soc., 1912, 65.

- Slingerland & Crosby, Man. Fr. Ins. 353, 1914.

Dasyneura leguminicola

- Bethune, Ont. Ent. Soc. R. 39, 132, '09.

- Dean, Kans. Agr. Educ. I, 4, 83, 1909.

- Fletcher, Can. Exp. Farms B. 52, 28, 1905.

- Fletcher, Ont. Ent. Soc. R. 36, 84, '06.

- Folsom, Ill. B. 134, 118, 1909.

- Folsom, Ill. Ent. R. 25, 46, 1909.

- Gibson, Farm & Dairy, Can., Jan. 7, 1909, 4.

- Gossard, Ohio B. 198, 35, 1908.

- Gossard, Ohio B. 233, 76, 1911.

- Jarvis, Ont. Ent. Soc. R. 37, 42, 1907.

- Lochhead, Syn. Ec. Ent. 87, 1914.

- Lovett, Oreg. Bien. Crop Pest R. f. 1913-1914, 157.

***Dasyneura leguminicola* (Cont'd)**

- O'Kane, Inj. Ins. 219, 1914.
 Pettit, Mich. B. 258, 287, 1910.
 Sanderson, Ins. Pests, 212, 1912.
 Smith, U. S. F. B. 323, 19, 1908.
 Webster, U. S. C. 69, 3, 1906.
 Webster, U. S. Y. B., 1907, 250.
 Webster, U. S. Y. B., 1908, 375.
 Westgate & Hillman, U. S. F. B., 455, 38, 1911.
 ——— U. S. Y. B., 1905, 635.
 ——— U. S. Y. B., 1908, 569.

Dasyneura pseudacaciae

- Felt, N. Y. R. 21, 125, 1906.

Dasyneura trifolii

- Folsom, Ill. B. 134, 171, 1909.
 Folsom, Ill. Ent. R. 25, 99, 1909.
 Garman, Ky. B. 125, 45, 1906.
 Lochhead, Syn. Ec. Ent. 87, 1914.

Datana angusii

- Felt, N. Y. St. Mus. Mem. 8, 535, '06.
 Osborn, J. Ec. Ent. I, 145, 1908.
 Sanderson, N. H. R. 17-18, 346, 1906.
 Swenk, Nebr. Hort. Soc., '09, 92, 119.

Datana integerrima

- Barre & Conradi, S. C. B. 141, 44, '09.
 Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 50.
 Douglass, Ind. Ent. R. 4, 140, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 303, '05.
 Felt, N. Y. R. 21, 98, 1906.
 Felt, N. Y. R. 22, 59, 1907.
 Felt, U. S. B. 67, 39, 1907.
 Forbes, Ill. B. 151, 470, 1911.
 Forbes, Ill. Ent. R. 26, 8, 1911.
 Garman, Ky. B. 120, 54, 1905.
 Gossard, Fla. B. 79, 300, 1905.
 Gossard, J. Ec. Ent. I, 188, 1908.
 Houser, Ohio B. 194, 191, 1908.
 Lochhead, Syn. Ec. Ent. 59, 1914.
 Morgan, Tenn. Bd. Ent. R. f. '10, 44.
 Rosenfeld, J. Ec. Ent. III, 216, 1910.
 Russell, Pr. Ent. Soc. Wash. XV, 91, 1913.
 Sanderson, N. H. R. 17-18, 343, 1906.
 Smith, U. S. B. 67, 105, 1907.
 Webster, Pr. Ent. Soc. Wash. X, 74, '08.
 Worsham, Ga. Bd. Ent. B. 33, 119, '10.
 Worsham, Ga. Hort. Soc., 1910, 119.
 Young, Ont. Ent. Soc. R. 38, 23, 1908.
 ——— U. S. Y. B., 1906, 514.
 ——— U. S. Y. B., 1907, 549.
 ——— U. S. Y. B., 1908, 577.

Datana major

- Patch, Me. B. 162, 357, 1908.

Datana ministra

- Baldwin, Ind. Ent. R. 5, 80, 1912.
 Bethune, Ont. Agr. Coll. B. 158, 8, '07.
 Brittain, Pr. Ent. Soc. B. C. 4, 15, 1914.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 43, 1913.
 Douglass, Ind. Ent. R. 2, 69, 1910.
 Douglass, Ind. Ent. R. 3, 112, 1910.
 Felt, N. Y. St. Mus. Mem. 8, 535, 1906.
 Felt, N. Y. R. 22, 45, 1907.
 Felt, U. S. B. 67, 39, 1907.
 Funk, Pa. Dept. Agr. B. 152, 219, 1907.
 Garman, Ky. B. 133, 35, 1908.
 Gossard, O. Farm., Sept. 11, 1909, 197.
 Gossard, Ohio B. 233, 91, 1911.
 Grant, Ont. Ent. Soc. R. 39, 10, 1909.
 Haseman, Mo. Hort. Soc., 1911, 242.
 Hitchings, Me. Ent. R. 5, 14, 1910.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 342.
 Johannsen & Patch, Me. B. 195, 239, 1911.
 Lamson, Conn. Storrs B. 71, 78, 1912.
 Levison, J. Ec. Ent. II, 363, 1909.
 Lochhead, Syn. Ec. Ent. 58, 1914.
 O'Kane, Inj. Ins. 270, 1914.
 Patch, Me. B. 123, 214, 1905.
 Patch, Me. B. 134, 224, 1906.
 Rumsey & Brooks, W. Va. R. f. 1907-1908, 19.
 Rumsey & Brooks, W. Va. B. 116, 238, 1908.
 Sanderson, N. H. R. 17-18, 324, 1906.
 Sanderson, U. S. B. 60, 75, 1906.
 Sanderson, Ins. Pests, 613, 1912.
 Severin, S. D. Hort. Soc. 11th R. 20, '14.
 Slingerland & Crosby, Man. Fr. Ins. 123, 1914.
 Smith, N. J. Ent. C. 29.
 Stuart, Vt. R. 18, 310, 1905.
 Swenk, Nebr. Hort. Soc. B. 19, 17, '08.
 Weldon, Md. Hort. Soc., 1907, 63, '08.
 Woods, Me. B. 137, 293, 1906.
 ——— U. S. Y. B., 1906, 512.

***Datana* sp.**

- Smith, N. J. R., 1906, 527.
 Smith, N. J. R., 1907, 410.

***Datana* sp. on walnut**

- Lochhead, Ont. Ent. Soc. R. 36, 137, 1906.

Datana spp.

- Chittenden, Nut Grow., Feb. '06, 118.
Moore, Wis. R. 23, 236, 1906.

Date palm scale, see *Parlatoria blanchardii***Dead Stuck**

- U. S. D. A. Ins. & Fung. Bd. Ins. 5, p. 68, 1914.

Deilephila gallii

- Gossard, Ohio B. 233, 140, 1911.
Patch, Me. B. 162, 356, 1908.

Deilephila lineata

- Cooley, Mont. B. 62, 224, 1905.
Cooley, Mont. R. 12, 272, 1906.
Cooley, Mont. B. 88, 85, 1912.
Ehrhorn, Cal. Hort. Comm. Bien. R., 2, 227, 1907.
Essig, Cal. Hort. B. II, 1-2, 155, 1914.
Garman, Ky. B. 133, 62, 1908.
Gossard, Ohio B. 233, 139, 1911.
Sanderson, U. S. F. B. 223, 8, 1905.
Sanderson, U. S. B. 57, 14, 1906.
Sanderson, Ins. Pests, 247, 528, 1912.
Watson, Fla. B. 112, 36, 1912.
——— U. S. Y. B., 1905, 635.

Delphastus pusillus

- Britton, Can. Ent., 1905, 185.
Britton, Conn. B. 181, 9, 1914.

Delphax maidis, see Peregrinus***Deltocephalus affinis***

- Osborn, U. S. B. 108, 82, 1912.

Deltocephalus configuratus

- Osborn, U. S. B. 108, 80, 1912.

Deltocephalus fuscinervosus

- Osborn, U. S. B. 108, 80, 1912.

Deltocephalus inimicus

- Osborn, U. S. B. 108, 72, 1912.

Deltocephalus nigrifrons

- Osborn, U. S. B. 108, 77, 1912.

Deltocephalus sayi

- Osborn, U. S. B. 108, 84, 1912.

Deltocephalus sonorus

- Osborn, U. S. B. 108, 79, 1912.

Dendroctonus approximatus

- Hopkins, U. S. B. 83, 77, 1909.

Dendroctonus arizonicus

- Hopkins, U. S. B. 83, 72, 1909.

Dendroctonus barberi

- Hopkins, U. S. B. 83, 49, 1909.

Dendroctonus borealis

- Hopkins, U. S. B. 83, 132, 1909.

Dendroctonus brevicornis

- Hopkins, U. S. Y. B., 1907, 162.

- Hopkins, U. S. B. 58, 59, 1909.

- Hopkins, U. S. B. 83, 42, 1909.

- Hopkins, U. S. C. 125, 2, 1910.

- Hopkins, U. S. C. 143, 5, 1912.

- Howard, U. S. R. Ent., 1906, 15.

- Swaine, Ont. Ent. Soc. R. 43, 90, 1913.

- Swaine, Can. Exp. Farms, Ent. B. 7, 13, 1914.

- Webb, U. S. B. 58, 17, 1906.

- U. S. Y. B., 1905, 632.

- U. S. Y. B., 1906, 515.

Dendroctonus convexifrons

- Hopkins, U. S. B. 83, 53, 1909.

Dendroctonus engelmanni

- Hopkins, U. S. Y. B., 1907, 161.

- Hopkins, U. S. B. 58, 59, 1909.

- Hopkins, U. S. B. 83, 126, 1909.

- Hopkins, U. S. C. 125, 2, 1910.

- Hopkins, U. S. C. 142, 6, 1912.

- U. S. Y. B. 1908, 574.

Dendroctonus frontalis

- Hinds, Ala. Poly. C. 15, 1912.

- Hopkins, U. S. Y. B., 1907, 163.

- Hopkins, U. S. B. 58, 58, 1909.

- Hopkins, U. S. B. 83, 56, 1909.

- Hopkins, U. S. C. 125, 1, 1910.

- Hopkins, St. Louis Lumberm., July 1, 1911, 669.

- Hopkins, U. S. F. B. 476, 5, 1911.

- Howard, U. S. R. Ent. 1906, 14.

- Mason, South. Lumberm., Sept. 30, '11, 35.

- Zavitz, Ont. Ent. Soc. R. 36, 126, 1906.

- U. S. Y. B., 1905, 632.

- U. S. Y. B., 1906, 515.

- U. S. Y. B., 1907, 549.

- U. S. Y. B., 1908, 574.

Dendroctonus jeffreyi

- Hopkins, U. S. B. 83, 101, 1909.

- Hopkins, U. S. C. 143, 5, 1912.

- U. S. Y. B., 1908, 574.

Dendroctonus mexicanus

- Hopkins, U. S. B. 83, 74, 1909.

Dendroctonus micans

- Hopkins, U. S. B. 83, 141, 1909.

Dendroctonus monticolae

- Brunner, U. S. D. A. B. 111, 4, 1914.

- Hopkins, U. S. Y. B., 1907, 162.

- Hopkins, U. S. B. 58, 59, 1909.

- Hopkins, U. S. B. 83, 80, 1909.

- Hopkins, U. S. C. 125, 2, 1910.

- Hopkins, U. S. C. 143, 4, 1912.

- Hopkins, Ent. News, 1914, 133.
 Swaine, Can. Exp. Farms Ent. B. 7, 20, 26, 1914.
 ——— U. S. Y. B., 1906, 515.
 ——— U. S. Y. B., 1907, 548.
 ——— U. S. Y. B., 1908, 574.
- Dendroctonus murrayanae**
 Hopkins, U. S. B. 83, 138, 1909.
 Swaine, Ont. Ent. Soc. R. 43, 89, 1913.
- Dendroctonus obesus**
 Hopkins, U. S. B. 83, 132, 1909.
 Swaine, Can. Exp. Farms Ent. B. 7, 33, 1914.
- Dendroctonus parallelocollis**
 Hopkins, U. S. B. 83, 75, 1909.
- Dendroctonus piceaperda**
 Felt, N. Y. St. Mus. Mem. 8, 379, 1906.
 Hopkins, Pr. Ent. Soc. Wash., VIII, 5, 1906.
 Hopkins, U. S. Y. B., 1907, 160.
 Hopkins, U. S. B. 58, 58, 75, 1909.
 Hopkins, U. S. B. 83, 114, 1909.
 Hopkins, U. S. C. 125, 2, 1910.
 ——— U. S. Y. B., 1906, 515.
- Dendroctonus ponderosae**
 Butterick, J. Ec. Ent. V, 456, 1912.
 Hopkins, U. S. B. 56, 5, 1905.
 Hopkins, U. S. Y. B., 1907, 162.
 Hopkins, U. S. B. 58, 59, 76, 1909.
 Hopkins, U. S. B. 83, 90, 1909.
 Hopkins, U. S. C. 125, 2, 1910.
 Hopkins, U. S. C. 142, 7, 1912.
 Howard, U. S. R. Ent., 1906, 13.
 Howard, U. S. R. Ent., 1909, 21.
 Swaine, Ont. Ent. Soc. R. 43, 90, 1913.
 ——— U. S. Y. B., 1905, 631.
 ——— U. S. Y. B., 1906, 515.
 ——— U. S. Y. B., 1907, 548.
 ——— U. S. Y. B., 1908, 574.
 ——— W. Va. Lumberm., Jan. 10, 1908, 11.
- Dendroctonus pseudotsugae**
 Hopkins, U. S. B. 58, 59, 1909.
 Hopkins, U. S. B. 83, 106, 1909.
 Hopkins, U. S. C. 125, 3, 1910.
 Hopkins, U. S. C. 142, 6, 1912.
 Swaine, Ont. Ent. Soc. R. 43, 90, 1913.
 Swaine, Can. Exp. Farms Ent. B. 7, 28, 1914.
 ——— U. S. Y. B., 1906, 515.
 ——— U. S. Y. B., 1907, 549.
 ——— U. S. Y. B., 1908, 574.
- Dendroctonus punctatus**
 Hopkins, U. S. B. 83, 139, 1909.
- Dendroctonus rufipennis**
 Hopkins, U. S. B. 83, 136, 1909.
- Dendroctonus simplex**
 Hopkins, U. S. B. 83, 103, 1909.
 Swaine, Ont. Ent. Soc. R. 43, 89, 1913.
 ——— U. S. Y. B., 1906, 515.
- Dendroctonus sp.**
 Burke, Pr. Ent. Soc. Wash. IX, 115, '08.
 Hopkins, Va. Agr. R. f. 1911, 154, 1911.
 ——— U. S. Y. B., 1907, 549.
- Dendroctonus spp.**
 Hopkins, Tech. B. 17, pt. 1, U. S. Bur. Ent. 1909.
 Hopkins, U. S. C. 126, 2, 1910.
- Dendroctonus terebrans**
 Felt, N. Y. St. Mus. Mem. 8, 342, 1906.
 Hopkins, U. S. B. 58, 62, 1909.
 Hopkins, U. S. B. 83, 146, 1909.
- Dendroctonus valens**
 Hopkins, U. S. B. 58, 62, 1909.
 Hopkins, U. S. B. 83, 153, 1909.
 Hopkins, U. S. C. 142, 6, 1912.
 Swaine, Ont. Ent. Soc. R. 43, 90, 1913.
 Swaine, Can. Exp. Farms Ent. B. 7, 20, 1914.
- Dendroctonus and fires**
 Yates, Engineer. News, Nov. 10, 1910, 517.
- Dendroctonus in spruce**
 Herrick, Rur. N. Y., 1910, 896.
- Dendrolimus pini**
 Hopkins, U. S. Y. B., 1907, 152.
- Dendrophagus cygnaei**
 Felt, N. Y. St. Mus. Mem. 8, 490, 1906.
- Dendrophagus globosus**
 Moore, Wis. R. 23, 237, 1906.
- Dendrotettix quercus**
 Davis, Ent. News, 1912, 2.
- Depressaria atomella**
 Felt, N. Y. R. 27, 116, 1912.
- Depressaria heracliiana**
 Bethune, Ont. Agr. Coll. B. 171, 28, '09.
 Chittenden, Ins. Inj. Veg. 187, 1907.
 Fulton, Wright & Gregg, Pa. B. 110, 29, 1911.
 Jarvis, Ont. Ent. Soc. R. 37, 48, 1907.
 Pettit, Mich. B. 233, 189, 1906.
 Sanderson, Ins. Pests, 417, 1912.
- Depressed flour-beetle, see Palorus subdepressus**

Dermacentor albipictus

Hunter & Hooker, U. S. B. 72, 51, '07.

Hunter & Bishopp, U. S. B. 105, 31, '11.

Dermacentor andersoni, *see* **D. venustus**

Dermacentor electus, *see* **D. variabilis**

Dermacentor nitens

Hooker, Bishopp & Wood, U. S. B. 106, 197, 1912.

Hunter & Hooker, U. S. B. 72, 52, 1907.

Stiles, Pr. Ent. Soc. Wash. VIII, 101, 1907.

——— U. S. Y. B., 1906, 516.

——— U. S. Y. B., 1907, 552.

Dermacentor occidentalis

Hunter & Hooker, U. S. B. 72, 51, 1907.

Hunter & Bishopp, U. S. Y. B., '10, 227.

Hunter & Bishopp, U. S. B. 105, 31, '11.

Hooker, Bishopp & Wood, U. S. B. 106, 181, 1912.

Mohler, U. S. B. An. Ind. B. 78, '05, 14.

Mohler, U. S. F. B. 258, 16, 1906.

Mohler, U. S. F. B. 569, 7, 1914.

Dermacentor parumapertus marginatus

Hooker, Bishopp & Wood, U. S. B. 106, 159, 1912.

Hunter & Bishopp, U. S. B. 105, 31, '11.

Dermacentor reticulatus, *see* **D. occidentalis**

Dermacentor sp.

Herns, Pac. Rur. Press, LXXXVII, 51, 1914.

Dermacentor variabilis

Cary, Ala. Poly. B. 141, 144, 1907.

Cotton, Tenn. B. 81, 65, 1908.

Hooker, Bishopp & Wood, U. S. B. 106, 190, 1912.

Hunter & Bishopp, U. S. Y. B., '10, 228.

Hunter & Hooker, U. S. B. 72, 50, 1907.

Mohler, U. S. B. An. Ind. B. 78, '05, 14.

Mohler, U. S. F. B. 258, 16, 1906.

Mohler, U. S. F. B. 569, 7, 1914.

Dermacentor venustus

Anderson, Denver Med. Times, Apr. 1909, 516.

Ashmead, Bost. Med. Surg. Jr., May 14, 1908, 749.

Birdseye, U. S. F. B. 484, 5, 1912.

Bishopp, U. S. C. 136, 1, 1911.

Bishopp, J. Ec. Ent. VI, 200, 1913.

Cockle, Pr. Ent. Soc. B. C. 1, 14, 1911.

Cooley, Mont. B. 75, 95, 1909.

Cooley, Mont. B. 85, 9, 1911.

Cooley, Mont. B. 92, 62, 1912.

Cooley, J. Ec. Ent. VI, 93, 1913.

Cooley, Mont. B. 98, 132, 1914.

Cooley, Mont. Bd. Ent. Bien. R. 1, 12, 1914.

Fricks, Pub. Health R. XXVIII, 1647, 1913.

Fricks, Pub. Health R. XXIX, 449, '14.

Hazlett, Colo. Med. IX, 185, 1912.

Herrick, Household Ins. 406, 1914.

Hooker, Bishopp & Wood, U. S. B. 106, 165, 1912.

Howard, U. S. R. Ent., 1911, 33.

Hunter & Bishopp, U. S. Y. B., '10, 225.

Hunter & Bishopp, U. S. B. 105, '11.

King, Pub. Health R. XXI, 863, 1906.

King, Mont. Bd. Ent. Bien. R. 1, 16, '14.

Maver, Jr. Infect. Dis., VII, 322, 327, 1911.

Maxey, Med. Sentinel, XVI, 666, 1908.

Mayer, Jr. Infect. Dis. VIII, 322, 1911.

McClintic, Pub. Health R. XXVII, 732, 1912.

McClintic, Pub. Health R. XXIX, 1008, 1914.

Milne, Jr. Infect. Dis. VIII, 339, 1911.

Moore, Jr. Infect. Dis. VIII, 339, 1911.

Pearse, Denver Med. Times, Feb. 1909, 415.

Ricketts, Jr. Amer. Med. Assoc. XLVII, 1067, 1906.

Ricketts, Jr. Amer. Med. Assoc. XLIX, 24 & 1278, 1907.

Ricketts, Jr. Infect. Dis., Jan. 1907, 141.

Ricketts, Johns Hopkins Hosp. Bull. XX, 151, 1909.

Ricketts, Med. Record, Nov. 20, 1909, 843.

Ricketts, Contrib. Med. Sci. Univ. Chicago Press, 1911.

Ricketts, Davis, Maver,—Ricketts Contrib. Med. Sci. Chicago, 1911.

Robinson, Med. Record, Nov. 28, 1908, 913.

Rosenau, Prevent. Med., 263, 1913.

Rucker, Milit. Surg., XXIX, 631, 1911.

Rucker, Pub. Health R. XXVII, 1465, 1912.

States, Denver Med. Times, Apr. 1909, 522.

Stiles, Bull. 14, Publ. Health Mar. Hosp. Serv., 1905.

Dermacentor venustus (*Cmt'd*)

Stiles, Bull. 20, Pub. Health Mar. Hosp. Serv., 1905.

Stith, Northwest Med., III, 201, 1905.

Todd, Can. Med. Assoc. Jr., Aug. 1912, 686.

Todd, Can. Med. Assoc. Jr., Dec. 1912, 1118.

Tuttle, 5th Bien. R. St. Bd. Health, Mont. 9, 1910.

Waugh, Denver Med. Times, Nov. '10.

Wood, U. S. D. A. B. 45, 1913.

——— U. S. Y. B., 1907, 552.

Dermacentor venustus, *legislation*

Cogswell, Mont. Bd. Health Bien. R. 7, 10, 1913-1914.

Dermacentor venustus, *parasite of*

Smith, U. of Penna. Med. Bull., Nov. 1910, 487.

Dermanyssus gallinae

Adamson, Nebr. Farm., July 23, '13, 749.

Banks, U. S. C. 92, 1, 1907.

Barnes, S. W. Stockm., Nov. 13, '14, 3.

Basley, Cal. Cult., XXXVIII, 212, '12.

Bell, U. S. F. B. 287, 48, 1907.

Bentley, Tenn. Bd. Ent. R. f. '13, 32.

Black, O. Farm., Oct. 8, 1910, 306.

Brockway, Mich. Farm., Aug. 14, 1909, 111.

Campbell, O. Farm., Sept. 2, 1911, 201.

Cooley, Mont. B. 92, 55, 1912.

Couch, South. Plant., Jan. 1908, 26.

Dean, Kans. Farm., Feb. 4, 1911, 26.

Ewing, Oreg. Coll. B. 92, 3, 1913.

Geer, South Cult., June 15, 1909, 26.

James, Pac. Rur. Press, LXXVI, 122, 1908.

James, S. W. Stockm., Aug. 28, '08, 13.

Kaup, Cal. Cult. XXXVII, 434, 1911.

Koethen, Cal. Cult. XLI, 267, 1913.

Koethen, Cal. Cult. XLII, 404, 1914.

Latham, O. Farm., June 15, 1912, 731.

Law, U. S. B. An. Ind. Horse R. 452, '07.

Lochhead, Syn. Ec. Ent. 102, 1914.

Matteson, Iowa Home, Oct. 7, '09, 1605.

McKinney, Nebr. Farm., Sept. 1, 1909, 775.

O'Kane, Inj. Ins. 377, 1914.

Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 133, 1911.

Pierce, Farm & Ranch, Oct. 23, '09, 14.

Pierce, S. W. Stockm., Oct. 8, 1909, 5.

Pierce, Deseret Farm., Nov. 20, '09, 10.

Pierce, Kans. Bd. Agr. Quart. R. vol. XXIX, 113, 1910.

Ransom, U. S. Y. B., 1905, 146.

Surface, Pa. D. A. Zoöl. III, 1, 29, 1913.

Taylor, Farm. Guide, Apr. 11, '14, 23.

Thomas, Cal. Cult., XXVIII, 526, '07.

Titterington, Iowa Home, Sept. 3, 1908, 1300.

Washburn, Minn. P. B. 22, 25, 1905.

Woods, Kans. Bd. Agr. Quart. R. vol. XXVII, 107, 213, 1908.

——— Conn. Farm., June 11, 1910, 10.

——— Conn. Farm., Apr. 20, 1912, 6.

——— Ind. Farm., May 2, 1908, 10.

——— Mich. Farm., July 5, 1913, 13.

——— The Ranch, Aug. 15, 1911, 14.

Dermatobia hominis

Busck, Pr. Ent. Soc. Wash. XIV, 9, '12.

Elliott, N. Or. Med. Surg. Jr., LXIX, 656, 1907.

Herrick, Household Ins. 426, 1914.

Knab, Amer. Jr. Trop. Dis. I, 464, '13.

Strauch, Jr. Cutan. Dis., Nov. '06, 522.

Stuart, Milit. Surg., XVII, 548, 1905.

Dermatobia noxialis, *see D. hominis***Dermestes lardarius**

Douglass, Ind. Ent. R. 1, 159, 1908.

Douglass, Ind. Ent. R. 2, 76, 1910.

Felt, N. Y. R. 20, 409, 1905.

Felt, N. Y. St. Mus. B. 129, 35, 1909.

Felt, N. Y. St. Mus. B. 136, 40, 1912.

Herrick, Household Ins. 272, 1914.

Lochhead, Can. Ent., 1906, 68.

Smith, N. J. B. 203, 34, 1907.

Surface, Pa. D. A. Zoöl. III, 1, 19, '13.

Whitmarsh, Ohio B. 253, 135, 1912.

——— Rur. N. Y., 1906, 824.

Dermestes pulcher

Felt, N. Y. St. Mus. Mem. 8, 489, 1906.

Dermestes vulpinus

Patch, Me. B. 162, 361, 1908.

Sanderson, U. S. B. 60, 76, 1906.

Dermeid beetle on tussock moth eggs

Volck, Cal. B. 183, 204, 1907.

Deromyia angustipennis

Quaintance & Brues, U. S. B. 50, 110, 1905.

Deromyia sp.

Hine, La. Crop Pest Comm. C. 6, 29, '06.

Derostenus arizonensis

Webster & Parks, J. Agr. Res. I, 80, '13.

- Derostenus diastatae**
 Phillips, J. Agr. Res. II, 26, 1914.
 Webster & Parks, J. Agr. Res. I, 80, '13.
- Derostenus pictipes**
 Webster & Parks, J. Agr. Res. I, 80, 1913.
- Derostenus primus**
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 18, 1906.
- Derostenus punctiventris**
 Phillips, J. Agr. Res. II, 28, 1914.
 Webster & Parks, J. Agr. Res. I, 80, '13.
- Derostenus salutaris**
 Crosby, N. Y. C. B. 308, 223, 1911.
- Derostenus varipes**
 Webster & Parks, J. Agr. Res. I, 81, '13.
- Desmia funeralis**
 Baldwin, Ind. Ent. R. 5, 112, 1912.
 Bethune, Ont. Agr. Coll. B. 158, 30, '07.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 94, 1913.
 Douglass, Ind. Ent. R. 3, 195, 1910.
 Gossard, Ohio B. 233, 140, 1911.
 O'Kane, Inj. Ins. 303, 1914.
 Quaintance & Shear, U. S. F. B. 284, 22, 1907.
 Sanderson, Ins. Pests, 523, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 418, 1914.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 14.
 Symons, Md. B. 101, 153, 1905.
- Desmia maculalis**, *see* **D. funeralis**
- Desmoris scapalis**
 Hunter & Hinds, U. S. B. 51, 66, '05.
 Pierce, U. S. B. 73, 45, 1908.
 Pierce, U. S. B. 100, 76, 1912.
- Destructive leaf-hopper**, *see* **Cicadula ex-
 itiosa**
- Destructive mealy bug**, *see* **Pseudococcus
 citri**
- Destructive pea aphid**, *see* **Macrosiphum
 pisi**
- Destructive pine bark-beetle**, *see* **Dendroc-
 tonus frontalis**
- Destructive spruce-wood borer**, *see* **Tetro-
 pium cinnamopterum**
- Devastating grasshopper**, *see* **Melanoplus
 devastator**
- Dexodes nigripes**
 Howard & Fiske, U. S. B. 91, 235, 296, 1911.
- Diabrotica atripennis**
 Forbes, Ill. Ent. R. 23, 189, 1905.
- Diabrotica balteata**
 Chittenden, U. S. B. 82, 69, 1910.
 Marsh, U. S. B. 82, 76, 1910.
 ——— U. S. Y. B., 1905, 629.
 ——— U. S. Y. B., 1906, 511.
 ——— U. S. Y. B., 1907, 545.
 ——— U. S. Y. B., 1908, 570.
- Diabrotica connexa**
 Chittenden, U. S. B. 82, 68, 1910.
 ——— U. S. Y. B., 1907, 545.
- Diabrotica duodecimpunctata**
 Bentley, Tenn. Bd. Ent. R. f., '13, 23, 34.
 Bethune, Ont. Agr. Coll. B. 171, 24, '09.
 Britton, Conn. R. 6, 277, 1907.
 Britton, Conn. R. 8, 809, 1909.
 Chittenden, U. S. C. 59, 2, 1905.
 Chittenden, Ins. Inj. Veg. 158, 191, '07.
 Chittenden, Va. Truck Exp. Sta. B. 2, 43, 1909.
 Clarke, Ala. Poly. B. 139, 13, 1907.
 Conradi, Tex. B. 89, 29, 1907.
 Conradi, Tex. Stockm. Farm., Apr. 3, 1907, 2.
 Forbes, Ill. Ent. R. 23, 188, 1905.
 Gahan, Md. Hort. Soc., 1905, 79, 1906.
 Garcia, N. Mex. B. 68, 17, 1908.
 Garman, Ky. B. 130, 45, 1907.
 Garman, Ky. Bur. Agr. Bien. R. 17, 231, 1908.
 Garman, Ky. B. 145, 293, 1909.
 Garrett, La. R. 21, 23, 1909.
 Gee, Prog. Farm., Apr. 6, 1912, 448.
 Gossard, Ohio B. 198, 34, 1908.
 Harned, Prog. Farm., June 3, 1909, 5.
 Harned, Prog. Farm., Mar. 1, 1913, 297.
 Haseman, Mo. Bd. Agr. R. 44, 270, 1912.
 Marsh, U. S. B. 82, 84, 1910.
 Metcalf, N. C. Dept. Agr. Sp. B. 65, '09.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 100, 1909.
 Newell & Smith, U. S. B. 52, 70, 1905.
 O'Kane, Inj. Ins. 111, 152, 1914.
 Pettit, Mich. B. 258, 291, 1910.
 Popenoe, Kans. Farm., June 13, 1907 706.
 Sanborn, Okla. B. 100, 32, 1912.
 Sanderson, Ent. News, 1906, 212.
 Sanderson, Ins. Pests, 158, 1912.
 Sherman, N. C. Dept. Agr. B. 26, 5, 15, 1905.

***Diabrotica duodecimpunctata* (Cont'd)**

Sherman, N. C. Dept. Agr. B. 35, 5, 21, 1914.

Smith, Ga. Bd. Ent. B. 16, 40, 1905.

Smith, N. C. B. 197, 33, 1908.

Smith, N. C. B. 205, 12, 1910.

Smith & Lewis, U. S. B. 60, 82, 1906.

Stedman, Mo. Bd. Agr. R. 38, 262, 1906.

Surface, Pa. D. A. Zoöl. II, 5, 193, 1912.

Swenk, Nebr. Bd. Agr. R. f. 1908, 295.

Swenk, Nebr. Bd. Agr. R. f. 1910, 369.

Symons, Md. B. 101, 160, 1905.

Symons, U. S. B. 60, 84, 1906.

Thomas, S. C. B. 161, 3, 1911.

Turner, Ala. Poly. C. 8, 3, 1911.

Webster, Farm & Ranch, June 5, '09, 11.

Webster, Kans. Farm., June 5, 1909, 1.

Webster, U. S. Y. B., 1908, 373.

Webster, U. S. D. A. B. 5, 1, 1913.

——— U. S. Y. B., 1905, 635.

——— U. S. Y. B., 1907, 545.

——— U. S. Y. B., 1908, 569.

Diabrotica longicornis

Bowman, Iowa Agric., Oct. 1905, 59.

Brant, Iowa Agric., June 1913, 567.

Chittenden, U. S. C. 59, 1, 6, 1905.

Chittenden, Or. Judd Farm., Sept. 29, 1906, 276.

Chittenden, Ins. Inj. Veg. 194, 1907.

Compton, Prai. Farm., Aug. 1, 1912, 3.

Dean, Kans. Agr. Educ. I, 4, 10, 1909.

Forbes, Ill. Ent. R. 23, 188, 1905.

Garman, Ky. B. 130, 45, 1907.

Garman, Ky. Bur. Agr. Bien. R. 17, 231, 1908.

Gossard, Ohio B. 198, 34, 1908.

Gossard, Ohio B. 233, 75, 1911.

Haseman, Mo. Bd. Agr. R. 44, 270, 1912.

Helmick, Iowa Agric., May 1914, 462.

Kohler, Iowa Agric., Nov. 1905, 84.

Lamson, Iowa Agric., June 1910, 386.

Menges, Pa. Dept. Agr. B. 238, 115, '13.

Menges, Pa. R. 18, 415, 1914.

O'Kane, Inj. Ins. 111, 1914.

Osborn, U. S. B. 52, 51, 1905.

Pettit, Mich. B. 258, 291, 1910.

Popenoe, Kans. Farm., June 13, 1907, 706.

Sanderson, Ins. Pests, 157, 1912.

Stedman, Mo. Bd. Agr. R. 38, 259, 1906.

Swenk, Nebr. Bd. Agr. R. f. 1910, 366.

Swenk, Nebr. Bd. Agr. R. f. 1908, 295.

Swenk, Nebr. Ent. B. 1, 79, 1913.

Troop, Ind. Farm., Aug. 10, 1912, 1.

Troop, Prai. Farm., Sept. 1, 1912, 7.

Webster, Pr. Ent. Soc. Wash. X, 73, '08.

Webster, U. S. Y. B., 1908, 373.

Webster, Farm & Ranch, June 5, '09, 11.

Webster, J. Ec. Ent. II, 463, 1909.

Webster, Kans. Farm., June 5, 1909, 1.

Webster, U. S. D. A. B. 8, 1, 1913.

West, Prai. Farm., Mar. 16, 1908, 4.

——— U. S. Y. B., 1908, 569.

Diabrotica picticornis

Chittenden, U. S. B. 82, 68, 1910.

Marsh, U. S. B. 82, 76, 1910.

——— U. S. Y. B., 1906, 511.

——— U. S. Y. B., 1907, 545.

Diabrotica soror

Bremner, Cal. Hort. Comm. Destr. Ins., 1910, 14.

Chittenden, U. S. B. 82, 71, 1910.

Clarke, Rur. Calif., Sept. 1907, 329.

Essig, Cal. Hort. B. II, 1-2, 228, 1913.

Forbes, Ill. Ent. R. 23, 188, 1905.

Lovett, Oreg. Coll. B. 91, 16, 23, 1913.

Quayle, Cal. B. 214, 501, 1911.

Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 201.

——— Cal. Cult., XXIX, 34, 1907.

——— Pac. Rur. Press, LXXXVII, 639, 1914.

——— Pac. Rur. Press, LXXXVIII, 371, 1914.

——— U. S. Y. B., 1906, 511.

——— U. S. Y. B., 1907, 545.

——— U. S. Y. B., 1908, 569, 572.

***Diabrotica* sp.**

——— Pac. Rur. Press, LXXI, 270, '06.

——— Pac. Rur. Press, LXXVI, 86, 1908.

——— Pac. Rur. Press, LXXXIV, 147, 1912.

***Diabrotica* spp.**

Sherman, Prog. Farm., Apr. 2, '08, 17.

Diabrotica tenella

Forbes, Ill. Ent. R. 23, 187, 1905.

Diabrotica trivittata

Chittenden, U. S. B. 82, 75, 1910.

Lovett, Oreg. Coll. B. 91, 16, 26, 1913.

——— Cal. Cult. XXIX, 34, 1907.

Diabrotica virgifera

Gillette, Colo. R. 24, 30, 1911.

Gillette, J. Ec. Ent. V, 364, 1912.

Diabrotica vittata

- Baldwin, Ind. Ent. R. 5, 137, 1912.
 Baldwin, Ind. Ent. R. 6, 37, 1914.
 Barre & Conradi, S. C. B. 141, 38, 1909.
 Bentley, Tenn. Agr., vol. 2, no. 5, 172, 1913.
 Bentley, Tenn. Bd. Ent. R. f. 1913, 34.
 Bethune, Ont. Agr. Coll. B. 171, 24, '09.
 Britton, Conn. R. 8, 807, 1909.
 Chandler, Mo. B. 102, 270, 1912.
 Chittenden, Ins. Inj. Veg. 156, 1907.
 Chittenden, U. S. C. 39, 2nd Ed., 1, '08.
 Chittenden, U. S. C. 31, 2nd Ed., 1, '09.
 Chittenden, Va. Truck Exp. Sta. B. 2, 40, 1909.
 Conradi, Tex. B. 89, 18, 1907.
 Davis, J. Ec. Ent. III, 180, 1910.
 Davis, Ill. Ent. R. 26, 115, 1911.
 Essig, Cal. Hort. B. II, 1-2, 229, 1913.
 Fletcher, Can. Exp. Farms B. 52, 45, '05.
 Forbes, Ill. Ent. R. 23, 188, 1905.
 Fulton, Wright & Gregg, Pa. B. 110, 24, 1911.
 Garcia, N. Mex. B. 68, 14, 1908.
 Gibson, Ont. Ent. Soc. R. 40, 11, 1910.
 Gossard, O. Farm., May 31, '13, p. 703.
 Headlee, J. Ec. Ent. I, 203, 1908.
 Headlee, N. H. R. 19-20, 499, 1908.
 Jarvis, Ont. Ent. Soc. R. 37, 48, 1907.
 Lewis, Pr. Ga. Hort. Soc. f. 1912, 11.
 Lloyd, Prai. Farm., June 15, 1910, 4.
 Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 17, 1906.
 Lochhead, Syn. Ec. Ent. 74, 1914.
 Marsh, U. S. B. 82, 82, 1910.
 Moore, Minn. R. 15, 68, 1914.
 Newell, La. Hort. Soc., 1908, 45.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 99, 1909.
 O'Kane, Inj. Ins. 150, 1914.
 Patch, Me. B. 148, 271, 1907.
 Pettit, Mich. B. 233, 182, 1906.
 Price, Va. C. 7, 60, 1909.
 Ruggles & Stakman, Minn. B. 121, 21, 1911.
 Sanborn, Okla. B. 100, 36, 1912.
 Sanderson, N. H. B. 129, 264, 1907.
 Sanderson, Ins. Pests, 379, 1912.
 Slingerland, Rur. N. Y., 1905, 505.
 Slingerland & Crosby, N. Y. C. B. 252, 344, 1908.

- Slingerland, Herriek & Crosby, N. Y. C. B. 283, 471, 1910.
 Smith, Ga. Bd. Ent. B. 16, 47, 1905.
 Smith, N. C. B. 197, 42, 1908.
 Smith, N. C. B. 205, 7, 1910.
 Surface, Pa. D. A. Zoöl. V, 12, 380, '08.
 Surface, Pa. D. A. Zoöl. VII, 2, 56, '09.
 Surface, Pa. D. A. Zoöl. I, 1, 30, 1911.
 Surface, Pa. D. A. Zoöl. II, 5, 193, '12.
 Swaine, Ont. Ent. Soc. R. 41, 99, 1911.
 Swenk, Nebr. Bd. Agr. R. f. 1910, 369.
 Symons, Md. B. 101, 181, 1905.
 Turner, Ala. Hort. Soc. R. 7, 225, 1910.
 Webster, U. S. D. A. B. 8, 1, 1913.
 Weldon, Md. Hort. Soc., 1907, 66, 1908.
 Wells, Or. Judd Farm., May 26, '06, 730.
 Wells, Nat'l Fr. Grow. & Gard., June 1910, 20.
 Wells, Mich. Farm., June 28, 1913, v. 140, p. 694.
 White, Rur. N. Y., 1907, 462.
 Woodbury, Farm. Guide, Mar. 19, '10, 6.
 Worsham, J. Ec. Ent. II, 209, 1909.
 ——— C. Gentl., 1906, 592.
 ——— Pac. Rur. Press, LXXXVIII, 75, 1914.
 ——— U. S. Y. B., 1906, 511.
 ——— U. S. Y. B., 1907, 545.
 ——— U. S. Y. B., 1908, 572.
 ——— Va. Agr. R. f., 1910, 86.

Diacrisia virginica

- Bailey, Vt. Agr. R. 6, 44, 1914.
 Bethune, Ont. Agr. Coll. B. 158, 31, '07.
 Bethune, Ont. Agr. Coll. B. 171, 14, '09.
 Forbes, Ill. Ent. R. 23, 72, 1905.
 Gibson, Ont. Ent. Soc. R. 36, 113, 1906.
 Gossard, Ohio B. 233, 141, 1911.
 Johannsen, Me. B. 177, 27, 1910.
 Lochhead, Syn. Ec. Ent. 66, 1914.
 Marsh, U. S. B. 82, 59, 1910.
 O'Kane, Inj. Ins. 181, 1914.
 Patch, Me. B. 162, 358, 1908.
 Pettit, Mich. B. 233, 161, 1906.
 ——— U. S. Y. B., 1907, 551.

Diadegma sp. on Tmetocera

- Scott & Paine, U. S. D. A. B. 113, 11, 1914.

Diamond-back moth, see *Plutella maculipennis***Diaperis hydni**

- Felt, N. Y. St. Mus. Mem. 8, 497, 1906.

Diaphania hyalinata

- Bethune, Ont. Agr. Coll. B. 171, 26, '09.
 Chittenden, Ins. Inj. Veg. 173, 1907.
 Conradi, Tex. B. 89, 26, 1907.
 O'Kane, Inj. Ins. 216, 1914.
 Pettit, Mich. B. 233, 185, 1906.
 Sanderson, Ins. Pests, 400, 1912.
 Smith, N. C. B. 197, 57, 1908.
 Smith, N. C. B. 205, 35, 1910.
 Smith, N. C. B. 214, 126, 1911.
 Smith, N. C. R. 34, 34, 1911.
 Watson, Fla. R., 1912, lxii
 Watson, Fla. Grow., July 26, 1913, 3.
 ——— U. S. Y. B., 1905, 629.
 ——— U. S. Y. B., 1907, 545.

Diaphania nitidalis

- Baldwin, Ind. Ent. R. 5, 140, 1912.
 Bentley, Tenn. Dept. Agr. Bien. R., 1909–1910, 52.
 Bentley, Tenn. Agr. vol. 2, no. 5, 172, 1913.
 Bentley, Tenn. Bd. Ent. R. f. 1913, 34.
 Bethune, Ont. Agr. Coll. B. 171, 26, '09.
 Chittenden, Ins. Inj. Veg. 171, 1907.
 Cory, Md. Hort. Soc., 1912, 188, 1913.
 Garman, J. Ec. Ent. V, 467, 1912.
 Headlee, Kans. Farm., Sept. 24, 1908, 1012.
 Lewis, Pr. Ga. Hort. Soc. f. 1912, 12.
 Morgan, Tenn. Bd. Ent. R. f. 1910, 48.
 O'Kane, Inj. Ins. 215, 1914.
 Reed, Ga. Hort. Soc. f., 1914, 59.
 Sanderson, Ins. Pests, 397, 1912.
 Smith, N. C. B. 197, 44, 1908.
 Smith, N. C. B. 205, 29, 1910.
 Smith, N. C. B. 214, 106, 1911.
 Smith, N. C. R. 34, 34, 1911.
 Symons & Cory, Md. B. 175, 177, 1913.
 Watson, Fla. R., 1912, lxii.
 Watson, Fla. Grow., July 26, 1913, 3.
 ——— U. S. Y. B., 1906, 511.
 ——— U. S. Y. B., 1907, 544.

Diaphania sp.

- U. S. Y. B., 1908, 572.

Diaphania spp.

- Ehrhorn, Pac. Rur. Press, LXXVI, 388, 1908.
 Stuck, South Cult., Aug. 15, 1912, 25.

Diapheromera femorata

- Butler, J. Ec. Ent. VII, 299, 1914.
 Felt, N. Y. St. Mus. Mem. 8, 533, 1906.
 Severin, J. Ec. Ent. III, 479, 1910.

Severin, J. Ec. Ent. IV, 307, 1911.

Williams, Ont. Ent. Soc. R. 37, 17, 1907.

Williams, Ont. Ent. Soc. R. 39, 11, 1909.

Young, Ont. Ent. Soc. R. 35, 6, 1905.

Diaphnidia hamata

Johnson, U. S. D. A. B. 19, 33, 1914.

Diaspis amygdali

Clarke, Ala. Poly. C. 1, 5, 1906.

Diaspis boisduvalii

Britton, Conn. R. 5, 240, 1906.

Diaspis bromeliae

Berger, Fla. R., 1907, xxxviii.

Carnes, Cal. Hort. Comm. Bien. R. 2, 199, 1907.

Davis, Ill. Ent. R. 27, 124, 1912.

Essig, Cal. Hort. B. II, 1–2, 123, 1913.

Diaspis carueli

Carnes, Cal. Hort. Comm. Bien. R. 2, 200, 1907.

Felt, N. Y. St. Mus. Mem. 8, 229, 1905.

Felt, N. Y. R. 22, 58, 1907.

Fernald, Mass. R. 25, II, 86, 1913.

Diaspis echinocacti cacti

Hunter, Pratt & Mitchell, U. S. B. 113, 25, 1912.

Diaspis pentagona, see Aulacaspis**Diaspis piricola, see Epidiaspis****Diaspis rosae, see Aulacaspis****Diastata sp.**

Forbes, Ill. Ent. R. 23, 164, 1905.

Diastictis, see Cymatophora**Diastrophus cuscuteformis**

Gossard, Ohio B. 233, 147, 1911.

Diastrophus nebulosus, see D. turgidus**Diastrophus turgidus**

Gossard, Ohio B. 233, 147, 1911.

O'Kane, Inj. Ins. 247, 1914.

Sanderson, Ins. Pests, 468, 1912.

Smith, N. J. Ent. C. 26.

Surface, Pa. D. A. Zoöl. III, 1, 9, 1913.

Diatraea saccharalis

Ainslie, U. S. C. 116, 1, 1910.

Ainslie, U. S. F. B. 634, 1, 1914.

Barber, La. Plant, June 10, 1911, 371.

Barber, U. S. C. 139, 1, 1911.

Chittenden, Ins. Inj. Veg. 201, 1907.

Comeaux, La. Plant., Jan. 7, 1911, 7.

Edgerton, La. B. 133, 9, 1911.

Forbes, Ill. Ent. R. 23, 91, 1905.

Garrett, La. Plant., June 15, 1912, 418.

Haseman, Mo. Bd. Agr. R. 44, 274, '12.

Holloway, U. S. C. 165, 6, 1912.

- Holloway, La. Plant., Dec. 20, '13, 416.
 Holloway, U. S. C. 171, 1913.
 Holloway, La. Plant., Oct. 31, '14, 285.
 Holloway, La. Plant., Dec. 19, 1914, 397.
 Howard, U. S. R. Ent., 1911, 15.
 Hunter, U. S. Y. B., 1911, 206.
 Kohler, Iowa Agric., Nov. 1905, 86.
 Luginbill, S. C. Dept. Agr. R. 10, 264, 1914.
 May, La. Plant., Dec. 22, 1906, 393.
 Morgan, J. Ec. Ent. I, 14, 1908.
 Newell, La. Plant., Apr. 11, 1908, 238.
 Newell & Smith, U. S. B. 52, 75, 1905.
 O'Kane, Inj. Ins. 126, 1914.
 Sherman, N. C. Dept. Agr. B. 26, 5, 25, 1905.
 Sherman, N. C. Dept. Agr. B. 35, 5, 25, 1914.
 Smith, Ga. Bd. Ent. B. 16, 37, 1905.
 Smith, N. C. B. 197, 35, 1908.
 Smith, N. C. R. 33, 32, 1910.
 Symons, Md. B. 101, 162, 1905.
 Titus, U. S. B. 54, 88, 1905.
 Van Dine, La. Plant., May 14, '10, 421.
 Watson, Fla. Dept. Agr. Quart. B. 3, vol. 24, 77, 1914.
 ——— La. Plant., Dec. 25, 1909, 403.
 ——— La. Plant., Jan. 29, 1910, 66.
 ——— La. Plant., May 21, 1910, 436.
 ——— La. Plant., Jan. 7, 1911, 4.
 ——— La. Plant., June 3, 1911, 348.
 ——— La. Plant., June 17, 1911, 379.
 ——— La. Plant., June 24, 1911, 396.
 ——— U. S. Y. B., 1908, 567, 569.
- Diatraea saccharalis** and birds
 ——— La. Plant., Jan. 14, 1911, 24.
 ——— La. Plant., Jan. 21, 1911, 34.
- Diatraea zeacolella**
 O'Kane, Inj. Ins. 125, 1914.
 Sanderson, Ins. Pests, 172, 181, 1912.
- Dialinopsis callichroma**
 Webster & Parks, J. Agr. Res. I, 81, '13.
- Dialinus begini**
 Phillips, J. Agr. Res. II, 28, 1914.
 Webster & Parks, J. Agr. Res. I, 78, '13.
- Dialinus pulchripes**
 Phillips, J. Agr. Res. II, 27, 1914.
- Dialinus websteri**
 Phillips, J. Agr. Res. II, 27, 1914.
 Webster & Parks, J. Agr. Res. I, 79, '13.
- Dibolia borealis**
 Patch, Me. B. 162, 359, 1908.
- Dibrachys boucheanus**
 Brodie, Ont. Ent. Soc. R. 37, 5, 1907.
 Haseman, Mo. B. 104, 324, 1912.
 Howard & Chittenden, U. S. C. 97, 7, 1908.
 Howard & Fiske, U. S. B. 91, 213, 1911.
 Lovett, Oreg. Bien. Crop Pest R. f., 1913-1914, 179.
- Dibrachys sp. on Tmetocera**
 Scott & Paine, U. S. D. A. B. 113, 11, 1914.
- Dicerca divaricata**
 Felt, N. Y. St. Mus. Mem. 8, 457, 1906.
 Gossard, Ohio B. 164, 22, 1905.
 Gossard, Ohio B. 233, 120, 1911.
- Dicerca obscura var. lurida**
 Felt, N. Y. St. Mus. Mem. 8, 442, 1906.
- Dicerca punctulata**
 Felt, N. Y. St. Mus. Mem. 8, 656, 1906.
- Dicerca tenebrosa**
 Felt, N. Y. St. Mus. Mem. 8, 657, 1906.
- Dicerca tuberculata**
 Felt, N. Y. St. Mus. Mem. 8, 656, 1906.
- Dichaetoneura leucoptera**
 Herrick, N. Y. C. B. 311, 291, 1912.
 Patch, Me. B. 148, 265, 1907.
- Dichelia sulfureana**, *see* **Epagoge**
- Dichelonycha albicollis**
 Felt, N. Y. St. Mus. Mem. 8, 694, 1906.
- Dichomeris**, *see* **Ypsolophus**
- Dichromorpha viridis**
 Forbes, Ill. Ent. R. 23, 212, 1905.
- Dichroscytus rufipennis**
 Felt, N. Y. St. Mus. Mem. 8, 687, 1906.
- Dicranotropis sp.**, *see* **Peregrinus**
- Dicymolomia julianis**
 Gahan, J. Ec. Ent. II, 236, 1909.
 Tucker, Can. Ent., 1911, 24.
- Dicyphus minimus**
 Morgan, U. S. Y. B., 1910, 294.
 O'Kane, Inj. Ins. 195, 1914.
 Sanderson, Ins. Pests, 226, 1912.
 Watson, Fla. B. 112, 37, 1912.
 Watson, Fla. B. 125, 1914, 76.
- Diedrocephala flavipes**
 Quayle, Cal. Hort. B. II, 3-4, 375, 1913.
- Diedrocephala coccinea**
 Osborn, U. S. B. 108, 60, 1912.
 ——— U. S. Y. B., 1906, 516.
- Diedrocephala versuta**
 Chittenden, Ins. Inj. Veg. 117, 1907.
- Diedrocephala**, *see also* **Draeculacephala**

- Diestrammena marmorata*
Cockerell, J. Ec. Ent. II, 79, 1909.
- Differential grasshopper*, *see* *Melanoplus differentialis*
- Diglochis omnivora*
Howard & Fiske, U. S. B. 91, 138, 144, 305, 1911.
- Diglochis* sp.
Hewitt, Can. Exp. Farms Ent. B. 5, 31, 1912.
Washburn, Minn. Ent. R. 13, 110, 1910.
- Dingy cutworm*, *see* *Feltia subgothica*
- Dinoderus pusillus*, *see* *Rhizopertha dominica*
- Dinoderus truncatus*
Chittenden, Amer. Mill., June 1, 1911, 471.
Chittenden, U. S. B. 96, 48, 1911.
- Diocles obliteratus*, *see* *Thymaris slingerlandana*
- Dione vanillae*
Rosenfeld, J. Ec. Ent. III, 217, 1910.
- Dioryctria abietella*
Britton, Conn. R. 11, 341, 1912.
Johannsen, Me. B. 207, 453, 1912.
- Dioryctria reniculella*
Felt, N. Y. St. Mus. Mem. 8, 684, 1906.
- Diosphyrus vulgaris*
Marsh, U. S. B. 109, 62, 1912.
- Diphadnus appendiculatus*, *see* *Pristiphora grossulariae*
- Diplacus ceroputo*, *see* *Ceroputo yuccae*
- Diplazon laetatorius*
Kelly, J. Ec. Ent. VII, 294, 1914.
- Diplosis pyrivora*, *see* *Contarinia*
- Diplosis sorghicola*, *see* *Contarinia*
- Diplosis* spp.
Smith, Cal. Hort. B. III, 1, 28, 1914.
- Diplosis tritici*, *see* *Contarinia*
- Diplosis violicola*, *see* *Contarinia*
- Diplotaxis frondicola*
Smith, U. S. B. 67, 103, 1907.
- Diplotaxis popino*
Morrill, Ariz. Comm. Agr. & Hort. R. 6, 30, 1914.
- Diprion* sp.
Swenk, Nebr. R. 24, 3, 1911.
- Dips for cattle*
Chapin, U. S. F. B. 603, 1914.
McKim, Nebr. Farm., May 20, 1908, p. 498.
- Disinfectant and insecticide*
——— U. S. D. A. Ins. & Fung. Bd., Ins. 3, p. 33, 1914.
- Disinfection, nursery*
Judd, Utah Bd. Hort. Bien. R. f., 1903–1904, 36, 1905.
- Disonycha caroliniana*
Felt, N. Y. St. Mus. Mem. 8, 563, 1906.
- Disonycha mellicollis*
Chittenden, U. S. B. 82, 29, 1909.
Chittenden, U. S. B. 127, 7, 1913.
- Disonycha triangularis*
Criddle, Ont. Ent. Soc. R. 43, 99, 1913.
Gibson, Can. Exp. Farms Ent. C. 2, 5, 1913.
O'Kane, Inj. Ins. 160, 1914.
Pettit, Mich. B. 233, 165, 1906.
- Disonycha varicornis*
Hunter, Pratt & Mitchell, U. S. B. 113, 22, 1912.
- Disonycha xanthomelaena*
Chittenden, Ins. Inj. Veg. 121, 1907.
Chittenden, U. S. B. 127, 8, 1913.
Gibson, Can. Exp. Farms Ent. C. 2, 5, 1913.
O'Kane, Inj. Ins. 159, 1914.
Sanderson, Ins. Pests, 335, 1912.
- Disparine*
Troop, Farm Guide, Apr. 22, 1905, 10.
- Dissosteira carolina*
Patch, Me. B. 148, 269, 1907.
- Dissosteira longipennis*
Forbes, Ill. Ent. R. 23, 213, 1905.
Kelly, J. Agr. Res. II, 439, 1914.
- Distillate spraying*
——— Cal. Cult. XXVII, 250, 1906.
- Ditoma quadriguttata*
Felt, N. Y. St. Mus. Mem. 8, 489, 1906.
- Ditropinotus aureoviridis*
Houser, Ohio B. 226, 196, 1911.
Webster, U. S. Y. B., 1907, 255.
Webster, U. S. C. 66, Rev. Ed. 4, 1908.
- Dr. Hess Dip and Disinfectant*
——— U. S. D. A. Ins. & Fung. No. 160, 1914.
- Dr. Legear's Dip and Disinfectant*
——— U. S. D. A. Ins. & Fung. No. 10, 1913.
- Dr. David Roberts Disinfectall*
——— U. S. D. A. Ins. & Fung. No. 165, 1913.
- Dog flea*, *see* *Ctenocephalus canis*

- Dokkenwadel Insecticide fertilizer**
Smith, N. J. R., 1909, 388.
- Dolerus arvensis**
Gossard, Ohio B. 233, 68, 1911.
Sanderson, Ins. Pests, 142, 1912.
- Dolerus collaris**
Gossard, Ohio B. 233, 68, 1911.
Sanderson, Ins. Pests, 142, 1912.
- Dorchaschema alternatum**
Svenk, Nebr. Hort. Soc., 1909, 110.
- Dorchaschema nigrum**
Felt, N. Y. St. Mus. Mem. 8, 444, 1906.
- Dorycephalus platyrhynchus**
Osborn, U. S. B. 108, 65, 1912.
- Dorymyrmex pyramicus**
Girault, U. S. B. 68, 45, 1907.
Hunter & Pierce, U. S. B. 114, 140, 1912.
Pierce, U. S. B. 100, 72, 1912.
Quaintance & Jenne, U. S. B. 103, 152, 1912.
Vickery, U. S. B. 85, 116, 1910.
- Doryphora decemlineata**, *see* **Leptinotarsa**
- Dorytomus parvicollis**
Felt, N. Y. St. Mus. Mem. 8, 475, 1906.
- Dorytomus vagenotatus**
Felt, N. Y. St. Mus. Mem. 8, 475, 1906.
- Douglas fir beetle**, *see* **Dendroctonus pseudotsugae**
- Draeculacephala mollipes**
Forbes, Ill. Ent. R. 23, 205, 1905.
Osborn, U. S. B. 108, 56, 1912.
- Draeculacephala noveboracensis**
Osborn, U. S. B. 108, 59, 1912.
- Draeculacephala reticulata**
Osborn, U. S. B. 108, 52, 1912.
- Drasteria erechtea**
Garman, Ky. B. 125, 45, 1906.
Gossard, Ohio B. 233, 80, 1911.
O'Kane, Inj. Ins. 179, 1914.
Pettit, Mich. B. 258, 282, 1910.
- Drasterius elegans**
Webster, U. S. D. A. B. 5, 10, 1913.
Webster, U. S. D. A. B. 8, 6, 1913.
- Drepanaphis acerifolii**
Felt, N. Y. St. Mus. Mem. 8, 175, 1905.
Felt, J. Ec. Ent. II, 306, 1909.
Felt, N. Y. R. 25, 79, 1910.
—— U. S. Y. B., 1907, 550.
- Drepanaphis monelli**
Gillette, J. Ec. Ent. III, 371, 1910.
- Drepanosiphum acerifolii**, *see* **Drepanaphis**
- Drepanosiphum platanoides**
Davidson, J. Ec. Ent. III, 377, 1910.
Wilson, J. Ec. Ent. II, 349, 1909.
- Dried-currant moth**, *see* **Ephestia cautella**
- Driving spray**
Quaintance, J. Ec. Ent. V, 159, 1912.
- Dromius piceus**
Hammar, U. S. B. 80, 110, 1910.
- Drosophila amoena**
Felt, N. Y. St. Mus. B. 129, 11, 1909.
Felt, N. Y. St. Mus. B. 136, 17, 1912.
Patch, Me. B. 134, 222, 1906.
- Drosophila ampelophila**
Coit, Ariz. B. 58, 325, 1908.
Essig, Cal. Hort. B. II, 1-2, 253, 1913.
Felt, N. Y. St. Mus. B. 129, 11, 1909.
Felt, N. Y. R. 25, 14, 1910.
Felt, N. Y. St. Mus. B. 136, 17, 1912.
Howard, U. S. C. 71, 3, 1906.
Howard, U. S. F. B. 459, 7, 1911.
Lutz, Jr. N. Y. Ent. Soc. XXII, 134, 1914.
Quaintance & Brues, U. S. B. 50, 127, 1905.
Smith, N. J. B. 203, 29, 1907.
- Drosophila busckii**
Essig, Cal. Hort. B. II, 1-2, 255, 1913.
Johannsen, Me. B. 177, 37, 1910.
- Drosophila punctulata**, *see* **D. repleta**
- Drosophila repleta**
Essig, Cal. Hort. B. II, 1-2, 255, 1913.
Quaintance & Brues, U. S. B. 50, 127, 1905.
- Drosophila sp.**
Herrick, Household Ins. 264, 1914.
Surface, Pa. D. A. Zool. III, 1, 22, 1913.
Whitmarsh, Ohio B. 253, 111, 1912.
- Drosophila spp.**, *disseminating spores*
Burrill, Ill. B. 118, 574, 1907.
- Droughts and insects**
Parrott, N. Y. Fr. Grow. Assoc., '10, 26.
- Drug-store beetle**, *see* **Sitodrepa panicea**
- Dry sulphur compounds**
Smith, N. J. R., 1909, 364.
- Dryocampa rubicunda**, *see* **Anisota**
- Dryocoetes autographus**
Felt, N. Y. St. Mus. Mem. 8, 672, 1906.
- Dryocoetes sp.**
Felt, N. Y. St. Mus. Mem. 8, 468, 1906.
- Dryophanta polita**
Felt, N. Y. St. Mus. Mem. 8, 626, 1906.
- Dusky plant-bug**, *see* **Calocoris rapidus**

Dust spray

Buckingham, Pac. Rur. Press, LXXVII, 124, 1909.

Chase, Pr. Ga. Hort. Soc., 1907, 129.

Close, Del. B. 69, 1905.

Close, Del. B. 72, 1906.

Close, Del. B. 76, 1906.

Close, N. J. Hort. Soc., 1906, 88.

Crandall, Ill. Hort. Soc. f. 1904, 114, 1905.

Crandall, Ill. Hort. Soc. f. 1905, 547, 1906.

Crosby & Leonard, N. Y. C. B. 346, 493, 1914.

Faurot, Mo. Fr. Exp. Sta. B. 19, 8, 1908.

Foster, Pac. Rur. Press, LXXVII, 164, 1909.

Greiner, Farm & Fireside, Mar. 15, '05, 4.

Haldeman, Nat'l Fr. Grow., Mar. '05, 12.

Hedrick, Prai. Farm., Feb. 23, 1905, 4.

Johnson, Minn. Hort. Soc., 1905, 468.

Keill, Ala. Hort. Soc. R. 2, 31, 1905.

Lewis, Wis. Farm., May 4, 1905, 7.

Lincoln, Mo. Hort. Soc., 1905, 311.

Maxwell, Wis. Farm., July 6, 1905, 7.

Maxwell, Mo. Hort. Soc., 1906, 117.

Miller, W. Va. Hort. Soc. 14th R. 16, '07.

Mills, Cal. Cult., XXXII, 246, 1909.

Phillips, South. Plant., June 1907, 550.

Quayle, Pac. Rur. Press LXXXI, 192, 911.

Reddick, Pr. West. N. Y. Hort. Soc., 59 Meet., 76, 1914.

Reeves, Wis. Farm., May 18, 1905, 8.

Smith, N. J. R., 1905, 626.

Smith, N. J. B. 213, 38, 1908.

Stewart, Mo. Hort. Soc., 1906, 361.

Stewart, Northw. Hort., Apr. 1907, 76.

Taft, Nat'l Fr. Grow., Mar. 1905, 9.

Taft, Mich. Hort. Soc., 1908, 142, 1909.

Troop, Farm. Guide, Apr. 22, 1905, 10.

——— Kans. Hort. Soc., 1911, 339.

Dusty oak borer, *see* *Romaleum atomarius*

Dynamite in mosquito work

Smith, N. J. R., 1911, 550.

Dynastes tityus

Newell & Smith, U. S. B. 52, 72, 1905.

Dysdercus suturellus

Hunter, U. S. C. 149, 1, 1912.

Morrill, U. S. B. 86, 95, 1910.

Sample, Fla. Fr. Prod. News, Sept. 30, 1910, 2.

Sanderson, U. S. F. B. 223, 21, 1905.

Sanderson, Ins. Pests, 253, 1912.

Sellards, Fla. R., 1905, 27.

Sellards, Fla. R., 1906, xvii.

Webster, U. S. F. B. 307, 16, 1907.

Yocum, Fla. Fr. Prod. News, Jan. 22, 1909, 5.

Dytopasta yumaella

Hunter, Pratt & Mitchell, U. S. B. 113, 36, 1912.

Ear flies, *see* *Chrysops*

Eastern larch beetle, *see* *Dendroctonus simplex*

Eastern spruce beetle, *see* *Dendroctonus piceaperda*

Eburia quadrigeminata

Felt, N. Y. St. Mus. Mem. 8, 462, 1906.

Eccoptogaster, *see* *Scolytus*

Ecdytolpha insitiana

Cotton, Ohio Nurs. Orch. Insp. B. 7, 19, 1906.

Douglass, Ind. Ent. R. 2, 68, 1910.

Felt, N. Y. St. Mus. Mem. 8, 478, 1906.

Houser, Ohio B. 194, 196, 1908.

Echocerus cornutus

Dean, Kans. B. 189, 213, 1913.

Herrick, Household Ins. 270, 1914.

Echocerus maxillosus

Dean, Kans. B. 189, 213, 1913.

Eciton commutatus

Hunter & Pierce, U. S. B. 114, 139, '12.

Pierce, U. S. B. 100, 69, 1912.

Eciton schmitti

Newell, J. Ec. Ent. VII, 147, 1914.

Ectatomma tuberculatum

Burke, Pr. Ent. Soc. Wash. VII, 89, '05.

Cook, Tech. B. 10, U. S. Bur. Ent., '05.

Howard, U. S. R. Ent., 1905, 282.

Howard, U. S. R. Ent., 1906, 12.

Hunter & Hinds, U. S. B. 51, 149, 1905.

Hunter & Pierce, U. S. B. 114, 139, '12.

Pierce, U. S. B. 100, 69, 1912.

Ectobia germanica, *see* *Blatella*

Ectodemia populella

Gibson, Ont. Ent. Soc. R. 44, 19, 1914.

Edema albifrons

Lochhead, Ont. Ent. Soc. R. 36, 137, 1906.

Egg-plant flea-beetle, *see* *Epitrix fuscica*

Eight-spotted forester, *see* *Alypia octomaculata*

- Eiphosoma texana**
Hunter, Pratt & Mitchell, U. S. B. 113, 22, 1912.
- Elachertes johannseni**
Johannsen, Me. B. 207, 458, 1912.
- Elachertes sp.**
Girault, U. S. B. 68, 44, 1907.
Johannsen & Patch, Me. B. 195, 243, 1911.
- Elachiptera longula**
Britton, Conn. R. 4, 214, 1905.
- Elaphidion parallelum**
Dean & Pears, Kans. Agr. Educ. VI, 2, 34, 1913.
- Elaphidion sp.**
Smith, N. J. R., 1910, 349.
Weiss, N. J. R., 1912, 427.
- Elaphidion villosum**
Bailey, Vt. Agr. R. 6, 44, 1914.
Chittenden, Nut Grow., Mar. '06, 137.
Chittenden, U. S. C. 130, 1, 1910.
Cotton, Ohio Nurs. Orch. Insp. B. 7, 46, 1906.
Douglass, Ind. Ent. R. 4, 113, 1912.
Felt, N. Y. St. Mus. Mem. 8, 59, 1905.
Forbes, Ill. B. 151, 512, 1911.
Forbes, Ill. Ent. R. 26, 50, 1911.
Funk, Pa. Dept. Agr. B. 152, 216, '07.
Gossard, Fla. B. 79, 306, 1905.
Gossard, Ohio B. 164, 18, 1905.
O'Kane, Inj. Ins. 251, 1914.
Slingerland & Crosby, Man. Fr. Ins. 200, 1914.
Swaine, Ont. Ent. Soc. R. 43, 91, 1913.
Symons, Md. B. 101, 130, 1905.
Washburn, Minn. R. 12, 91, 1908.
Webb, U. S. Y. B., 1910, 355.
- Elasmocerus terminatus**
Felt, N. Y. St. Mus. Mem. 8, 501, 1906.
- Elasmopalpus lignosellus**
Chittenden, Ins. Inj. Veg. 204, 1907.
Forbes, Ill. Ent. R. 23, 94, 1905.
O'Kane, Inj. Ins. 127, 1914.
Smith, N. C. R. 33, 31, 1910.
——— U. S. Y. B., 1905, 634.
- Eleodes clavicornis**
Swenk, J. Ec. Ent. II, 335, 1909.
- Eleodes dentipes**
Swenk, J. Ec. Ent. II, 335, 1909.
- Eleodesletcheri vandykei**
Hyslop, U. S. B. 95, 78, 1912.
- Eleodes omissa var. borealis**
Essig, Cal. Hort. B. II, 8, 627, 1913.
- Eleodes opaca**
Swenk, Nebr. Bd. Agr. R. f., 1909, 236.
Swenk, J. Ec. Ent. II, 333, 1909.
Swenk, Nebr. Bd. Agr. R. f., 1909, 236.
Swenk, Nebr. Bd. Agr. R. f., 1910, 363.
- Eleodes pimelioides**
Hyslop, U. S. B. 95, 80, 1912.
- Eleodes sp.**
Bruner, Nebr. Ent. R. f., 1907-1908, 10.
- Eleodes sulcipennis**
Webster, U. S. B. 112, 32, 1912.
- Elis sexcincta**
Davis, U. S. F. B. 543, 14, 1913.
- Elleschus ephippiatus**
Felt, N. Y. St. Mus. Mem. 8, 567, 1906.
- Elm aphids**
Patch, Me. B. 181, 1910.
- Elm borer**, *see* **Saperda tridentata**
- Elm insects**
Surface, Pa. D. A. Zoöl. II, 6, 236, 1912.
- Elm leaf beetle**, *see* **Galerucella luteola**
- Elm plant louse**, *see* **Colopha ulmicola**
- Elm sawfly**, *see* **Tomostethus multicinctus**
- Elm spanworm**, *see* **Ennomos subsignarius**
- Emphytus canadensis**
Felt, N. Y. R. 20, 406, 1905.
Felt, U. S. B. 52, 51, 1905.
Gibson, Ont. Ent. Soc. R. 36, 115, 1906.
Johannsen, Me. B. 187, 8, 1911.
- Emphytus cinctipes**
Gibson, Ont. Ent. Soc. R. 36, 111, 1906.
Gibson, Ont. Ent. Soc. R. 41, 16, 1911.
- Emphytus cinctus**
Chittenden, U. S. C. 105, 10, 1908.
- Empoasca flavescens**
Slingerland & Crosby, Man. Fr. Ins. 183, 1914.
——— U. S. Y. B., 1908, 571.
- Empoasca mali**
Baldwin, Ind. Ent. R. 5, 71, 1912.
Brittain, Pr. Ent. Soc. B. C. 4, 16, 1914.
Britton, Conn. R. 4, 216, 1905.
Brues, Wis. R. 22, 324, 1905.
Dean & Pears, Kans. Agr. Educ. VI, 2, 127, 1913.
Essig, Cal. Hort. B. II, 1-2, 41, 1913.
Garman, Ky. B. 133, 57, 1908.
Gibson, Ont. Ent. Soc. R. 39, 119, 1909.
Gibson, Can. Hort. XXXIII, 93, 1910.
Gibson, Ont. Ent. Soc. R. 40, 10, 1910.

Empoasca mali (*Cont'd*)

- Gibson, Ont. Ent. Soc. R. 41, 13, 1911.
 Gossard, Ohio B. 233, 101, 1911.
 Gossard, Ohio Hort. Soc., 1914, 106.
 Haseman, Mo. Hort. Soc., 1911, 232.
 Haseman, J. Ec. Ent. VI, 240, 1913.
 Hewitt & Hayhurst, Ark. B. 109, 443, 1911.
 Osborn, U. S. B. 108, 100, 1912.
 Parrott, J. Ec. Ent. II, 79, 1909.
 Sanderson, J. Ec. Ent. III, 210, 1910.
 Shaw, Ohio Bd. Agr. R. 63, 1908, 695.
 Shaw, Ohio Nurs. Orch. Insp. R. 7, 17, 1909.
 Slingerland & Crosby, Man. Fr. Ins. 180, 1914.
 Smith, N. J. R., 1910, 308.
 Smith, N. J. R., 1911, 419.
 Surface, Pa. D. A. Zööl. 1, 4, 158, 1911.
 Treherne, Pr. Ent. Soc. B. C., 4, 26, 1914.
 Washburn, U. S. B. 52, 43, 56, 1905.
 Washburn, U. S. B. 60, 88, 1906.
 Washburn, J. Ec. Ent. I, 142, 1908.
 Washburn, Minn. R. 12, 11, 1908.
 Washburn, J. Ec. Ent. II, 54, 1909.
 Washburn, J. Ec. Ent. III, 162, 1910.
 Washburn, Minn. Ent. R. 13, 31, 1910.
 Webster, J. Ec. Ent. I, 326, 1908.
 Webster, J. Ec. Ent. II, 211, 1909.
 Webster, Iowa, B. 111, 5, 1910.
 Webster, J. Ec. Ent. III, 503, 1910.
 Weiss, N. J. R., 1912, 435.
 ——— U. S. Y. B., 1905, 832.
 ——— U. S. Y. B., 1906, 512, 514.
 ——— U. S. Y. B., 1908, 573.

Empoasca pyricola

O'Kane, Inj. Ins. 313, 1914.

Empoasca rosae, *see* **Typhlocyba****Empoasca** sp.

Ball, U. S. B. 66, 51, 1909.

Empoasca unicolor

Parrott, J. Ec. Ent. II, 79, 1909.

Empoasca viridescens

U. S. Y. B., 1908, 573.

Empria, *see* **Harpiphorus****Emulsifier**

Smith, N. J. B. 213, 23, 1908.

Emulsion No. 3

Smith, N. J. R., 1905, 608.

Enarmonia caryana

Chittenden, Nut Grow., Mar. '06, 139.

Felt, N. Y. St. Mus. Mem. 8, 583, 1906.

Garman, J. Ec. Ent. V, 467, 1912.

Gossard, Fla. B. 79, 305, 1905.

——— U. S. Y. B., 1906, 513.

——— U. S. Y. B., 1907, 549.

——— U. S. Y. B., 1908, 579.

Enarmonia interstinctana

Fletcher, Can. Exp. Farms B. 52, 29, '05.

Fletcher, Ont. Ent. Soc. R. 36, 84, 1906.

Folsom, Ill. B. 134, 133, 1909.

Folsom, Ill. Ent. R. 25, 61, 1909.

Gossard, Ohio B. 198, 38, 1908.

Gossard, Ohio B. 233, 77, 1911.

O'Kane, Inj. Ins. 217, 1914.

Pettit, Mich. B. 258, 285, 1910.

Sanderson, Ins. Pests, 216, 1912.

Webster, J. Ec. Ent. II, 211, 1909.

Enarmonia nigricana

Chittenden, U. S. B. 66, 95, 1909.

——— U. S. Y. B., 1908, 571.

Enarmonia prunivora

Baldwin, Ind. Ent. R. 5, 54, 1912.

Bethune, Ont. Agr. Coll. R. 34, 31, '09.

Brittain, Pr. Ent. Soc. B. C., 4, 14, '14.

Caesar, Ont. Agr. Coll. B. 187, 36, 1911.

Caesar, Ont. Ent. Soc. R. 41, 21, 1911.

Caesar, Ont. Ent. Soc. R. 43, 75, 1913.

Caesar, Ont. Ent. Soc. R. 44, 50, 1914.

Clinton & Britton, Conn. R. f., 1909, 1910, 595.

Dean & Peairs, Kans. Agr. Educ. VI, 2, 61, 1913.

Douglass, Ind. Ent. R. 3, 123, 1910.

Faurot, Mo. Fr. Exp. Sta. B. 23, 24, '12.

Faurot, Mo. Bd. Agr. R. 45, 572, 1913.

Felt, N. Y. R. 23, 32, 1908.

Foster & Jones, U. S. B. 80, 45, 1909.

Gibson, Ont. Ent. Soc. R. 42, 11, 1912.

Haseman, Mo. Hort. Soc., 1911, 247.

Johannsen, Me. B. 177, 27, 1910.

Johannsen & Patch, Me. Comm. Agr. R. f., 1910, 367.

Lochhead, Syn. Ec. Ent. 56, 1914.

O'Kane, Inj. Ins. 339, 1914.

Parrott, N. Y. Dept. Agr. B. 50, 1739, 1913.

Quaintance, U. S. B. 68, 49, 1908.

Quaintance & Scott, U. S. F. B. 492, 16, 1912.

Sanderson, Ins. Pests, 628, 1912.

Schoene & Fulton, N. Y. St. C. 25, 5, '13.

Slingerland, N. Y. Fr. Grow. Assoc., 1909, 124.

- Slingerland & Crosby, Man. Fr. Ins. 23, 1914.
- Swenk, Nebr. Hort. Soc. B. 19, 7, 1908.
- Taylor, J. Ec. Ent. II, 237, 1909.
- Treherne, Pr. Ent. Soc. B. C., 4, 20, '14.
- U. S. Y. B., 1907, 547.
- U. S. Y. B., 1908, 575.
- Enarmonia youngana**
Johannsen, Me. B. 207, 453, 1912.
- Encarsia luteola**
Morrill & Back, U. S. B. 102, 8, 1912.
- Encarsia variegata**
Morrill & Back, U. S. B. 92, 10, 1911.
- Morrill & Back, U. S. B. 102, 8, 1912.
- Encarsia versicolor**
Davis, Ill. Ent. R. 27, 132, 1912.
- Enchenopa binotata**
Cotton, Ohio Nurs. Orch. Insp. B. 7, 29, 1906.
- Felt, N. Y. St. Mus. Mem. 8, 594, 1906.
- Entocolophus sordidus**
Bruner, U. S. B. 54, 64, 1905.
- Encyrtus flavus**
Cowan, Farm & Ranch, July 2, '10, 3.
- Essig, Cal. Hort. B. II, 1-2, 270, 1913.
- Isaac, Bug vs. Bug, 22, 1906.
- Quayle, J. Ec. Ent. IV, 512, 1911.
- Endelomyia rosae**
Chittenden, U. S. C. 105, 1, 1908.
- Cooley, Mont. B. 92, 61, 1912.
- Gibson, Ont. Ent. Soc. R. 36, 111, 1906.
- U. S. Y. B., 1907, 551.
- Engelmann spruce beetle**, *see* **Dendroctonus engelmanni**
- English grain-aphis**, *see* **Macrosiphum granaria**
- Eniscopilus purgatus**
Dew, J. Ec. Ent. VI, 365, 1913.
- Ennomos magnarius**
Felt, N. Y. R. 27, 54, 1912.
- Ennomos subsignarius**
Britton, Conn. R. 8, 842, 1909.
- Felt, C. Gentl., 1908, 107.
- Felt, J. Ec. Ent. I, 150, 330, 1908.
- Felt, N. Y. R. 23, 23, 1908.
- Felt, J. Ec. Ent. II, 306, 1909.
- Felt, N. Y. R. 24, 51, 1909.
- Felt, J. Ec. Ent. III, 381, 1910.
- Felt, N. Y. R. 25, 100, 1910.
- Felt, N. Y. R. 26, 62, 1911.
- Garman, Ky. B. 120, 65, 1905.
- Garman, Ky. B. 133, 29, 1908.
- Gibson, Ott. Nat. XXII, 117, 1908.
- Gibson, Ont. Ent. Soc. R. 39, 118, 1909.
- Herrick, N. Y. C. B. 286, 1910.
- O'Kane, Inj. Ins. 283, 1914.
- Slingerland & Crosby, Man. Fr. Ins. 99, 1914.
- Smith, N. J. R., 1908, 317.
- Winn., Ent. Soc. Ont. R. 40, 56, 1910.
- U. S. Y. B., 1908, 578.
- Ennyomma clistoides**
Ainslie, U. S. B. 85, 141, 1910.
- Ennyomma globosa**
Hunter & Pierce, U. S. B. 114, 142, 1912.
- Pierce, U. S. B. 100, 48, 1912.
- Entedon albitarsis**
Howard & Fiske, U. S. B. 91, 263, 1911.
- Entedon epigonus**
Howard & Fiske, U. S. B. 91, 30, 1911.
- Entedon hagenowi**
Marlatt, U. S. C. 51 Rev., 11, 1908.
- Entomoid**
Fernald, Mass. R. 25, I, 88, 1913.
- Entomophthora aulicae**, *see* **Euproctis chrysorrhoea**, *fungus on*
- Entomoscelis adonidis**
Criddle, Nor'-West Farm., Dec. 20, 1912, 1593.
- Criddle, J. Ec. Ent. V, 251, 1912.
- Fletcher, Can. Exp. Farms B. 52, 42, 1905.
- Threherne, Pr. Ent. Soc. B. C. 4, 28, '14.
- Epagoge sulfureana**
Cotton, Ohio Nurs. Orch. Insp. B. 7, 37, 1906.
- Forbes, Ill. Ent. R. 23, 174, 1905.
- Franklin, Ent. News, 1907, 19.
- Hardenburg & Malde, Wis. R. 24, 312, 1907.
- Hardenburg, Wis. B. 159, 14, 1908.
- Hardenburg & Malde, Wis. Cranb. Grow. Assoc., 21st Meet., 12, 1908.
- Pettit, Mich. B. 233, 177, 1906.
- Epargyreus tityrus**
Cotton, Ohio Nurs. Orch. Insp. B. 7, 27, 1906.
- Douglass, Ind. Ent. R. 2, 72, 1910.
- Felt, N. Y. St. Mus. Mem. 8, 556, 1906.
- Ephedrus incompletus**
Russell, U. S. D. A. B. 90, 10, 1914.
- Ephestia cautella**
Chittenden, Amer. Mill., July 1, 1909, 595.

- Chittenden, U. S. B. 104, 9, 1911.
 Johannsen & Patch, Me. B. 195, 240, 1911.
- Ephestia elutella**
 Maskew, Cal. Hort. B. I, 8, 366, 1912.
- Ephestia kuehniella**
 Bethune, Ont. Agr. Coll. R. 32, 46, 1907.
 Bethune, Ont. Ent. Soc. R. 39, 134, '09.
 Chittenden, Amer. Mill., 1909, 462, 630, 695.
 Chittenden, U. S. C. 112, 1, 1910.
 Cooley, Mont. B. 98, 126, 1914.
 Dean, Kans. Agr. Educ. I, 4, 61, 1909.
 Dean, Kans. B. 189, 222, 1913.
 Dietz, Ind. Ent. R. 6, 80, 1914.
 Doten, Nev. B. 73½, 45, 1910.
 Doten, Nev. R. f. 1911, 34.
 Girault, Ill. B. 156, 72, 1912.
 Girault, Ill. Ent. R. 27, 61, 1912.
 Goodwin, Ohio B. 234, 172, 1912.
 Gossard, Ohio B. 233, 85, 1911.
 Gossard, O. Farm., Feb. 7, 1914, 151.
 Herrick, Household Ins. 242, 1914.
 Howard, U. S. B. 54, 80, 1905.
 Howard, U. S. R. Ent., 1910, 35.
 Morris, Ont. Ent. Soc. R. 44, 25, 1914.
 Newell & Smith, U. S. B. 52, 72, 73, '05.
 O'Kane, Inj. Ins. 360, 1914.
 Parker, U. S. D. A. B. 15, 2, 1913.
 Pettit, Mich. B. 244, 206, 1907.
 Sanderson, Ins. Pests, 190, 1912.
 Smith, N. C. B. 203, 18, 1909.
 Surface, Pa. D. A. Zoöl. VI, 11, 395, '09.
 Surface, Pa. D. A. Zoöl. III, 1, 8, 1913.
 Symons, Md. B. 101, 169, 1905.
 Washburn, U. S. B. 52, 56, 1905.
 Washburn, U. S. B. 60, 87, 1906.
 ——— U. S. Y. B., 1905, 630.
 ——— U. S. Y. B., 1906, 516.
 ——— U. S. Y. B., 1907, 551.
 ——— U. S. Y. B., 1908, 579.
- Ephialtes carbonarius**
 Compere, Cal. Fr. Grow., Feb. 4, '05, 3.
 Compere, Cal. Fr. Grow., Feb. 25, '05, 3.
 Isaac, Cal. Cult. XXV, 6, 1905.
 Maskew, Cal. Cult. XXIV, 363, 1905.
 ——— Cal. Fr. Grow., July 15, '05, 2.
 ——— Pac. Rur. Press, LXIX, 206, '05.
- Ephistemus apicalis**
 Felt, N. Y. St. Mus. Mem. 8, 491, 1906.
- Epicaerus formidosus**
 Hooker, U. S. B. 67, 110, 1907.
- Epicaerus imbricatus**
 Chase, Better Fr., Apr. 1911, 93.
 Forbes, Ill. Ent. R. 23, 113, 1905.
 O'Kane, Inj. Ins. 167, 329, 1914.
 Quaintance & Jenne, U. S. B. 103, 29, 1912.
 Sanborn, Okla. B. 100, 68, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 371, 1914.
- Epicauta cinerea**
 Bethune, Ont. Agr. Coll. B. 171, 13, '09.
 Douglass, Ind. Ent. R. 2, 85, 1910.
 Gibson, Ent. Soc. Ont. R. 42, 84, 1912.
 Metcalf, N. C. Dept. Agr. Sp. B. 55, '09.
 Sanborn, Okla. B. 100, 61, 1912.
 Sanderson, U. S. F. B. 223, 22, 1905.
 Swenk, Nebr. Ent. B. 1, 21, 1913.
 Tucker, Kans. Farm., Aug. 16, '06, 844.
- Epicauta ferruginea**
 Sanderson, U. S. F. B. 223, 22, 1905.
- Epicauta lemniscata**
 Chittenden, Ins. Inj. Veg. 67, 1907.
 Conradi, Tex. B. 89, 42, 1907.
 Dean, Kans. Agr. Educ. I, 4, 78, 1909.
 Headlee, Kans. B. 155, 337, 1908.
 Sanborn, Okla. B. 100, 62, 1912.
 Sanderson, U. S. F. B. 223, 22, 1905.
 Swenk, Nebr. Ent. B. 1, 21, 1913.
 ——— U. S. Y. B., 1908, 573.
- Epicauta maculata**
 Chittenden, Ins. Inj. Veg. 68, 1907.
 Cooley, Mont. B. 64, 42, 1906.
 Cooley, Mont. R. 12, 262, 1906.
 Cooley, Mont. B. 71, 149, 1908.
 Cooley, Mont. B. 98, 127, 1914.
 Gibson, Ent. Soc. Ont. R. 42, 86, 1912.
 Gillette, Colo. R. 20, 24, 1907.
 Sanborn, Okla. B. 100, 62, 1912.
- Epicauta marginata**
 Chittenden, Ins. Inj. Veg. 124, 1907.
 Chittenden, U. S. B. 82, 91, 1911.
 Fulton, Wright & Gregg, Pa. B. 110, 20, 1911.
 Gibson, Ent. Soc. Ont. R. 42, 84, 1902.
 Surface, Pa. Dept. Agr. R. 17, 163, 1911.
 ——— U. S. Y. B., 1908, 573.
- Epicauta pennsylvanica**
 Bethune, Ont. Agr. Coll. B. 171, 13, '09.
 Chittenden, Ins. Inj. Veg. 220, 1907.
 Chittenden, U. S. B. 82, 92, 1911.
 Conradi, U. S. B. 52, 66, 1905.
 Conradi, Tex. B. 89, 41, 1907.

- Criddle, J. Ec. Ent. IV, 239, 1910.
 Fletcher, Farm. Advocate, Can., 1907, 1867.
 Gibson, Ont. Ent. Soc. R. 40, 11, 1910.
 Gibson, Ent. Soc. Ont. R. 42, 83, 1912.
 Lochhead, Ont. Ent. Soc. R. 40, 70, '10.
 Patch, Me. B. 148, 277, 1907.
 Patch, Me. B. 162, 366, 1908.
 Quayle, J. Ec. Ent. IV, 527, 1911.
 Sanborn, Okla. B. 100, 61, 1912.
- Epicauta sericans**
 Gibson, Ent. Soc. Ont. R. 42, 87, 1912.
- Epicauta sericea**
 Criddle, J. Ec. Ent. IV, 239, 1911.
- Epicauta sp.**
 Dickens, Kans. B. 194, 488, 1914.
 Forbes, Ill. Ent. R. 23, 111, 1905.
 Hughes, Iowa B. 137, 70, 1913.
 Newell, Proc. La. Agr. Soc. 18, 47, 1905.
 Pettit, Mich. B. 233, 162, 1906.
 Watson, Fla. B. 112, 36, 1912.
 Watson, Fla. B. 125, 1914, 75.
- Epicauta trichrus**
 Chittenden, U. S. B. 82, 92, 1911.
- Epicauta vittata**
 Chittenden, Ins. Inj. Veg. 67, 1907.
 Chittenden, U. S. B. 82, 91, 1911.
 Conradi, U. S. B. 60, 68, 1906.
 Cooley, Mont. B. 88, 88, 1912.
 Gibson, Ent. Soc. Ont. R. 42, 86, 1912.
 Pettit, Mich. B. 233, 195, 1906.
 Quayle, J. Ec. Ent. IV, 527, 1911.
 Sanborn, Okla. B. 100, 62, 1912.
 Sanderson, U. S. F. B. 223, 22, 1905.
 Surface, Pa. D. A. Zoöl. I, 1, 21, 1911.
 Swenk, Nebr. Bd. Agr. R. f. 1908, 303.
 Swenk, Nebr. Farm., Aug. 16, '11, p. 774.
 Swenk, Nebr. Farm., July 23, 1913, 738.
 Symons, Md. B. 101, 175, 1905.
 Weldon, Md. Hort. Soc., 1907, 65, 1908.
 ——— U. S. Y. B., 1908, 573.
- Epicnaptera americana**
 Felt, N. Y. St. Mus. Mem. 8, 525, 1906.
- Epidapus scabiei**
 Chittenden, Ins. Inj. Veg. 226, 1907.
 Gossard, J. Ec. Ent. IV, 209, 1911.
 Sanderson, Ins. Pests, 300, 1912.
- Epidapus epixanthe**
 Franklin, Ent. News, 1907, 19.
- Epidermoptes bifurcatus**
 Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 144, 1911.
- Epidermoptes bilobatus**
 Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 144, 1911.
- Epidiaspis piricola**
 Britton, Conn. R. 5, 241, 1906.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 204, 1907.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 112, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 224, 1907.
 Essig, Cal. Hort. B. II, 1-2, 126, 1913.
 Jones, U. S. B. 80, 151, 1910.
 Morris, Cal. Cult. XXXI, 318, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 234, 1914.
- Epilachna borealis**
 Barre & Conradi, S. C. B. 141, 38, 1909.
 Bentley, Tenn. Bd. Ent. R. f. 1913, 26.
 Britton, Conn. R. 8, 810, 1909.
 Britton, Conn. B. 181, 11, 1914.
 Chittenden, Ins. Inj. Veg. 160, 1907.
 O'Kane, Inj. Ins. 148, 1914.
 Sanderson, Ins. Pests, 391, 1912.
 Smith, N. C. B. 205, 13, 1910.
 Symons, Md. B. 101, 183, 1905.
 Titus, U. S. B. 54, 84, 1905.
 ——— U. S. Y. B. 1907, 545.
- Epilachna corrupta**
 Chittenden, Ins. Inj. Veg. 109, 1907.
 Garcia, N. Mex. B. 68, 18, 1908.
 Gillette, Colo. R. 20, 25, 1907.
 Herrick, Rur. N. Y., 1911, 921.
 Morrill, S. W. Stockm., Oct. 30, 1914, 9.
 O'Kane, Inj. Ins. 148, 1914.
- Epilachna guttata**
 Jarvis, Conn. Storrs B. 56, 268, 1909.
- Epilachna varivestis**
 Sanderson, Ins. Pests, 315, 1912.
- Epinotia claypoleana**
 Felt, N. Y. St. Mus. Mem. 8, 540, 1906.
- Epinotia piceafoliana**
 Johannsen, Me. B. 210, 34, 1913.
- Epinotia pyricolana**
 Foster & Jones, U. S. B. 80, 46, 1909.
 Hewitt & Hayhurst, Ark. B. 109, 444, 1911.
 Slingerland & Crosby, Man. Fr. Ins. 184, 1914.
 ——— U. S. Y. B., 1906, 512.
 ——— U. S. Y. B., 1908, 575.

Epitrimerus pyri

Parrott, Hodgkiss & Schoene, N. Y. St. B. 283, 313, 1906.

Epitrix cucumeris

Bennett, Colo. B. 143, 6, 1909.
 Bethune, Ont. Agr. Coll. B. 171, 33, '09.
 Britton, Conn. R. 6, 272, 1907.
 Caesar, Farm. Advocate, Can., '10, 830.
 Chandler, Mo. B. 102, 266, 1912.
 Chittenden, Ins. Inj. Veg. 217, 1907.
 Davis, Ill. Ent. R. 26, 145, 1911.
 Felt, N. Y. R. 20, 406, 1905.
 Fletcher, Can. Exp. Farms B. 52, 40, '05.
 Forbes, Ill. Ent. R. 23, 190, 1905.
 Fulton, Wright & Gregg, Pa. B. 110, 35, 1911.
 Gibson, Ont. Ent. Soc. R. 39, 119, 1909.
 Gibson, Ont. Ent. Soc. R. 40, 11, 1910.
 Gibson, Can. Exp. Farms Ent. C. 2, 8, '13.
 Gillette, U. S. B. 52, 61, 1905.
 Gillette, Colo. R. 20, 25, 1907.
 Gillette, Colo. R. 21, 134, 1908.
 Jarvis, Conn. Farm., June 11, 1910, 7.
 Johannsen, Me. B. 211, 37, 1913.
 Lochhead, Syn. Ec. Ent. 75, 1914.
 Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 23, 1906.
 O'Kane, Inj. Ins. 156, 1914.
 Patch, Me. B. 123, 217, 1905.
 Patch, Me. B. 134, 214, 1906.
 Pettit, Mich. B. 233, 180, 195, 1906.
 Quayle, J. Ec. Ent. IV, 525, 1911.
 Rogers, Pa. Dept. Agr. B. 190, 52, 1910.
 Sanderson, Ins. Pests, 298, 1912.
 Smith, N. J. R., 1906, 524.
 Smith, N. C. B. 197, 44, 1908.
 Smith, N. C. B. 205, 12, 1910.
 Stene, R. I. Bd. Agr. R. 22, 180, 1907.
 Symons, Md. B. 101, 180, 1905.
 Treherne, Pr. Ent. Soc. B. C. 4, 28, '14.
 Webster, J. Ec. Ent. III, 503, 1910.
 ——— C. Gentl., 1910, 682.
 ——— U. S. Y. B., 1908, 572.

Epitrix fuscula

Chittenden, Ins. Inj. Veg. 219, 1907.
 Fulton, Wright & Gregg, Pa. B. 110, 25, 1911.

Sanderson, Ins. Pests, 299, 1912.

——— U. S. Y. B., 1908, 572.

Epitrix parvula

Chittenden, Ins. Inj. Veg. 219, 1907.
 Gossard, Ohio B. 198, 38, 1908.

Gossard, Ohio B. 233, 84, 1911.

Hooker, U. S. B. 67, 109, 1907.

Johnson, Colo. Bd. Hort. R. f. '04, 72, '05.

Metcalf, N. C. Dept. Agr. Sp. B. 31, '09.

Morgan, U. S. Y. B., 1910, 282.

Morgan, U. S. C. 123, 3, 1910.

Morgan, Tenn. B. 93, 101, 1911.

O'Kane, Inj. Ins. 159, 1914.

Sanderson, Ins. Pests, 222, 298, 1912.

Sherman, Prog. Farm., Apr. 2, '08, 17.

Symons, Md. B. 101, 170, 180, 1905.

——— Rur. N. Y., 1911, 330.

——— U. S. Y. B., 1907, 542.

——— U. S. Y. B., 1908, 568, 572.

Epitrix subcrinita

Brittain, Pr. Ent. Soc. B. C. 4, 17, 1914.

Wilson, Oreg. Bien. Crop Pest R. f. 1911–1912, 163.

Epiurus indigator

Gill, U. S. B. 116, 102, 1913.

Johnson & Hammar, U. S. B. 116, 48, 1912.

Epizeuxis aemula

Forbes, Ill. Ent. R. 23, 86, 1905.

Epizeuxis denticularis

Felt, C. Gentl., 1908, 107.

Felt, N. Y. R. 23, 45, 1908.

Felt, J. Ec. Ent. 149, 1908.

Epizeuxis lubricalis

Felt, J. Ec. Ent. I, 149, 1908.

Epochra aestiva

——— Fla. R., 1906, xviii.

Epochra canadensis

Baldwin, Ind. Ent. R. 5, 127, 1912.

Cooley, Mont. B. 92, 60, 1912.

Cooley, J. Ec. Ent. VII, 193, 1914.

Gardner, Me. Comm. Agr. R. 1913, 58, 1914.

Gillette, U. S. B. 52, 59, 1905.

Gillette, Colo. B. 114, 24, 1906.

Gossard, Ohio B. 198, 73, 1908.

Johannsen, Me. B. 177, 36, 1910.

O'Kane, Inj. Ins. 346, 1914.

Paine, Psyche, 1912, 139.

Sanderson, Ins. Pests, 490, 1912.

Severin, Can. Ent., 1914, 312.

Slingerland & Crosby, Man. Fr. Ins. 355, 1914.

Treherne, Pr. Ent. Soc. B. C. 4, 27, '14.

Wilson, Oreg. Bien. Crop Pest R. f., 1911–1912, 135.

——— U. S. Y. B., 1908, 577.

- Erannis defoliaria**
Slingerland & Crosby, Man. Fr. Ins. 92, 1914.
- Erannis tiliaria**
Bailey, Vt. Agr. Ann. 6, 44, 1914.
Garman, Ky. B. 133, 62, 1908.
Gossard, Ohio B. 198, 41, 1908.
Gossard, Ohio B. 233, 106, 1911.
O'Kane, Inj. Ins. 284, 1914.
Slingerland & Crosby, Man. Fr. Ins. 89, 1914.
- Erax lateralis**
Hine, La. Crop Pest Comm. C. 6, 29, '06.
Titus, U. S. B. 54, 15, 1905.
- Erax varipes**
Ainslie, U. S. B. 85, 92, 1910.
- Eridontomerus primus**
Webster, U. S. Y. B., 1907, 255.
- Eriose of the vine, see Eriophyes vitis**
- Eriocampa cerasi, see Caliroa**
- Eriocampoides limacina, see Caliroa cerasi**
- Eriococcus adenostomae**
Carnes, Cal. Hort. Comm. Bien. R. 2, 172, 1907.
- Eriococcus araucaria**
Carnes, Cal. Hort. Comm. Bien. R. 2, 172, 1907.
- Eriococcus borealis**
Cockerell, J. Ec. Ent. V, 295, 1912.
- Eriococcus coriaceus**
Ehrhorn, Pac. Rur. Press LXXVI, 404, 1908.
- Eriococcus eucalypti**
Ehrhorn, Pac. Rur. Press, LXXVI, 404, 1908.
- Eriopeltis coloradensis**
Bruner, Nebr. Ent. R. f. 1907-1908, 10.
Smith, Nebr. Hort. Soc. B. 20, 14, 1908.
Swenk, Nebr. Bd. Agr. R. f. 1910, 368.
Swenk, Nebr. Ent. B. 1, 95, 1913.
- Eriopeltis festucae**
Fletcher, Can. Exp. Farm's B. 52, 30, '05.
Johannsen, Me. B. 177, 28, 1910.
Patch, Me. B. 121, 169, 1905.
Patch, Me. B. 162, 363, 1908.
—— U. S. Y. B., 1905, 634.
- Eriopeltis festucae, parasites of**
Patch, Me. B. 121, 177, 1905.
- Eriophyes abnormis**
Felt, N. Y. St. Mus. Mem. 8, 631, 1906.
- Eriophyes acericola**
Felt, N. Y. St. Mus. Mem. 8, 630, 1906.
- Eriophyes avellinae**
Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 125.
- Eriophyes calacladophora**
Watson, Fla. B. 112, 33, 1912.
- Eriophyes fraxini**
Patch, Me. B. 162, 367, 1908.
- Eriophyes fraxiniflora**
Felt, N. Y. St. Mus. Mem. 8, 633, 1906.
- Eriophyes fraxiniphila**
Patch, Me. B. 162, 367, 1908.
- Eriophyes malifoliae**
Brittain, Pr. Ent. Soc. B. C. 4, 18, 1914.
Parrott, Hodgkiss & Schoene, N. Y. St. B. 283, 312, 1906.
- Eriophyes oleivorus**
Austin, Cal. Hort. Comm. C., Nov., 1905, 11.
Bremner, Cal. Hort. Comm. Destr. Ins. 1910, 5.
Essig, Cal. Hort. B. II, 1-2, 4, 1913.
Morgan, C. Gentl., July 13, 1912, 17.
Quayle, Cal. B. 214, 489, 1911.
Quayle, Cal. B. 234, 494, 1912.
Yothers, U. S. C. 168, 7, 1913.
- Eriophyes padi**
Cooley, Mont. B. 98, 123, 1914.
Washburn, Minn. R. 11, 22, 1906.
Washburn, U. S. B. 60, 85, 1906.
—— U. S. Y. B., 1905, 633.
- Eriophyes phloeocoptes**
Cooley, Mont. B. 92, 55, 1912.
Gossard, Ohio B. 198, 57, 1908.
Gossard, Ohio B. 233, 121, 1911.
- Eriophyes populi**
Gillette, U. S. B. 52, 59, 1905.
- Eriophyes pyri**
Alderman, Giddings & Rumsey, W. Va. C. 7, 33, 1913.
Armstrong, Vt. Hort. Soc. R. 8, 104, '11.
Baldwin, Ind. Ent. R. 5, 92, 1912.
Baldwin, Farm. Guide, Nov. 15, '13, 28.
Baldwin, Ind. Ent. R. 6, 23, 1914.
Bethune, Ont. Agr. Coll. R. 34, 31, '09.
Bethune, Ont. Agr. Coll. R. 35, 31, 1910.
Bremner, Cal. Hort. Comm. Destr. Ins. 1910, 5.
Britton, Conn. R. 10, 700, 1911.
Buckley, Me. Dept. Agr. B. vol. X, 3, 7, 1911.
Byrne, Green's Fr. Grow., Mar. '13, 31.
Caesar, Ont. Agr. Coll. B. 177, 51, '09.

Eriophyes pyri (*Cont'd*)

- Caesar, Ont. Ent. Soc. R. 41, 23, 1911.
 Caesar, Ont. Agr. Coll. B. 198, 21, 1912.
 Caesar, Ont. Ent. Soc. R. 42, 28, 1912.
 Caesar, Ont. Ent. Soc. R. 43, 79, 1913.
 Cooley, Mont. B. 79, 53, 1910.
 Cooley, Mont. B. 88, 86, 1912.
 Cooley, Mont. B. 92, 55, 1912.
 Cooley, Mont. B. 98, 123, 1914.
 Cooley & Swingle, Mont. C. 17, 132, '12.
 Cummings, Vt. Hort. Soc. R. 9, 31, '12.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 66, 1913.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 122, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 230, 1907.
 Essig, Cal. Hort. B. II, 6, 563, 1913.
 Essig, Cal. Hort. B. II, 1-2, 6, 1913.
 Gillette, Colo. B. 114, 16, 1906.
 Gillette, Better Fr., Feb. 1910, 19.
 Gossard, Ohio B. 198, 56, 1908.
 Gossard, Ohio B. 233, 106, 1911.
 Felt, N. Y. R. 24, 48, 1909.
 Felt, N. Y. R. 25, 92, 1910.
 Felt, N. Y. R. 26, 47, 1911.
 Gossard, Ohio B. 164, 20, 1905.
 Hall, Better Fr., Mar. 1911, 55.
 Haseman, Mo. Hort. Soc., 1911, 252.
 Jordan, N. Y. St. B. 274, 516, 1905.
 Jordan, N. Y. St. B. 284, 344, 1906.
 Lochhead, Can. Hort. XXXII, 50, '09.
 O'Kane, Inj. Ins. 308, 1914.
 Parker, Mont. C. 16, 115, 1912.
 Parrott, U. S. B. 67, 43, 1907.
 Parrott, Pr. N. Y. Fr. Grow. Assoc., 8 Meet., 24, 1909.
 Parrott, N. Y. St. B. 306, 417, 1908.
 Parrott, N. Y. Dept. Agr. B. 50, 1743, 1913.
 Parrott, Hodgkiss & Schoene, N. Y. St. B. 283, 291, 1906.
 Parrott & Schoene, N. Y. St. B. 330, 454, 1910.
 Quaintance, U. S. C. 154, 1, 1912.
 Sanderson, J. Ec. Ent. III, 210, 1910.
 Sanderson, Ins. Pests, 636, 1912.
 Siegler, Me. Pom. Soc. R. f. '13, 143.
 Slingerland & Crosby, N. Y. C. B. 252, 340, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 227, 1914.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 469, 1910.
 Smith, N. C. B. 206, 85, 1910.
 Surface, Pa. Dept. Agr. R. 17, 163, '11.
 Symons, Md. B. 101, 150, 1905.
 Treherne, Pr. Ent. Soc. B. C. 4, 26, '14.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 480, 1911.
 Whiteside, Mont. Bd. Hort. f. 1905, 6, 37, 1907.
 Wilson, Oreg. Bien., Crop Pest R. f. 1913-1914, 123.
 ——— C. Gentl., 1906, 944.
 ——— C. Gentl., 1908, 706.
 ——— Mont. Bd. Hort. f., 1903-1904, 102, 1905.
 ——— Oreg. Bd. Hort. 8th Bien. R. 50, 1905.
 ——— Pac. Rur. Press, LXIX, 371, '05.
 ——— U. S. Y. B., 1908, 576.
- Eriophyes pyri var. variolata**
 Parrott, Hodgkiss & Schoene, N. Y. St. B. 283, 311, 1906.
- Eriophyes quadripes**
 Felt, N. Y. St. Mus. Mem. 8, 630, 1906.
 ——— C. Gentl., 1909, 572.
- Eriophyes sp.**
 Brittain, Pr. Ent. Soc. B. C. 4, 38, 1914.
 Moore, Wis. B. 190, 24, 1910.
 Sanderson, N. H. B. 129, 265, 1907.
- Eriophyes sp. on maple**
 Parrott, J. Ec. Ent. I, 311, 1908.
- Eriophyes sp. on willow**
 Garman, Ky. B. 120, 65, 1905.
- Eriophyes tristatus var. erinea**
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 125.
- Eriophyes vitis**
 Bremner, Cal. Hort. Comm. Destr. Ins. 5, 1910.
 Slingerland & Crosby, Man. Fr. Ins. 421, 1914.
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 124.
- Eriophyes waitei**
 Surface, Pa. Dept. Agr. R. 17, 152, '11.
- Eriophyid galls**
 Chadwick, N. Y. R. 23, 118, 1908.
- Eriopus floridensis**
 Chittenden, U. S. B. 125, 5, 1913.
- Eriosoma, see Schizoneura**

- Eristalis sp.**
Hall & Muir, Archiv. Intern. Med., Feb. 1913, 193.
- Eristalis tenax**
Britton, Conn. R. 10, 711, 1911.
Campbell & Cooper, Jr. Amer. Med. Assoc. LIII, 1160, 1909.
Douglass, Ind. Ent. R. 3, 213, 1910.
Patch, Me. B. 109, 180, 1905.
- Erium eriogoni**
Carnes, Cal. Hort. Comm. Bien. R. 2, 178, 1907.
- Ernobius mollis**
Felt, N. Y. St. Mus. Mem. 8, 694, 1906.
- Erythraeus arvensis**
Webster, U. S. B. 112, 33, 1912.
- Erythraeus sp. on Agromyza**
Webster & Parks, J. Agr. Res. I, 83, '13.
- Erythraeus sp. on leaf roller**
Gill, U. S. B. 116, 102, 1913.
- Erythraspides pygmaea**
Slingerland & Crosby, Man. Fr. Ins. 417, 1914.
- Erythroneura, see Typhlocyba**
- Essigella californica**
Essig, Cal. Hort. B. II, 1-2, 58, 1913.
Patch, Me. B. 202, 169, 1913.
- Essig's kermes, see Kermes essigii**
- Estigmene acraea**
Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 226, 1907.
Forbes, Ill. Ent. R. 23, 72, 1905.
Gibson, Ont. Ent. Soc. R. 36, 113, 1906.
Hooker, U. S. B. 67, 109, 1907.
Johannsen, Me. B. 177, 27, 1910.
Lochhead, Syn. Ec. Ent. 66, 1914.
Morrill, Ariz. Comm. Agr. & Hort. R. 6, 38, 1914.
Patch, Me. B. 162, 358, 1908.
Sanderson, U. S. F. B., 223, 14, 1905.
Sanderson, U. S. B. 57, 33, 1906.
Sanderson, Ins. Pests, 247, 1912.
——— U. S. Y. B., 1907, 551.
- Etiella zinckenella**
Chittenden, U. S. B. 82, 25, 1909.
Essig, Cal. Hort. B. II, 1-2, 173, 1913.
- Etiella zinckenella schisticolor**
Hyslop, U. S. B. 95, 89, 1912.
- Eubaphe rosa**
Forbes, Ill. Ent. R. 23, 71, 1905.
- Eucallipterus tiliae**
Gillette, J. Ec. Ent. III, 367, 1910.
Patch, Me. B. 187, 22, 1911.
- Eucalymnatus perforatus**
Carnes, Cal. Hort. Comm. Bien. R. 2, 184, 1907.
Essig, Cal. Hort. B. II, 1-2, 113, 1913.
- Eucalymnatus tessellatum**
Davis, Ill. Ent. R. 27, 123, 1912.
Sanders, J. Ec. Ent. II, 435, 1909.
- Euceraphis betulae**
Gillette, J. Ec. Ent. III, 371, 1910.
- Euclea delphinii**
Felt, N. Y. St. Mus. Mem. 8, 528, 1906.
- Euclea indeterminata**
Chittenden, U. S. B. 124, 5, 1913.
Felt, N. Y. St. Mus. Mem. 8, 528, 1906.
- Euclemensia bassettella**
Gibson, Ont. Ent. Soc. R. 43, 19, 1913.
- Euclemensia schwarzella**
Gable, Nebr. Bd. Agr. R. f., 1909, 253.
- Euchistus servus**
Metcalf, N. C. Dept. Agr. Sp. B. 58, '09.
- Euchistus variolarius**
Britton, Conn. R. 6, 274, 1907.
Jenkins, Conn. B. 180, 43, 1914.
- Eucoila hunteri**
Webster & Parks, J. Agr. Res. I, 82, '13.
- Eucoila impatiens**
Marlatt, U. S. C. 115, 7, 1910.
- Eucosma strenuana**
Smith, U. S. B. 67, 105, 1907.
- Eudamus proteus**
Chittenden, Ins. Inj. Veg. 112, 1907.
O'Kane, Inj. Ins. 188, 1914.
Watson, Fla. R., 1912, lxii.
- Eudemis botrana, see Polychrosis viteana**
- Eudemis vacciniana**
Franklin, Mass. B. 115, 6, 1907.
Franklin, Mass. B. 126, 3, 1908.
Franklin, J. Ec. Ent. II, 47, 1909.
Franklin, Wis. Cranb. Grow. Assoc., 22nd Meet., 33, 1909.
Franklin, Mass. R. 25, I, 229, 1913.
Franklin & Morse, Mass. B. 150, 53, 1914.
Hardenburg, Wis. Cranb. Grow. Assoc., 20th Meet., 4, 1907.
Hardenburg, Wis. B. 159, 6, 1908.
Hardenburg & Malde, Wis. R. 24, 309, 1907.
O'Kane, Inj. Ins. 299, 1914.
Peltier, Wis. Cranb. Grow. Assoc., 25th Meet., 10, 1912.

- Slingerland & Crosby, Man. Fr. Ins. 460, 1914.
 Smith, N. J. R., 1905, 563.
 Smith, N. J. R., 1911, 438.
 Whitson, Sandsten, Haskins & Ramsey, Wis. B. 119, 46, 1905.
- Eudercus picipes**
 Felt, N. Y. St. Mus. Mem. 8, 445, 1906.
- Euderus lividus**
 Forbes, Ill. Ent. R. 24, 128, 1908.
- Eudiotis**, *see* **Diaphania**
- Eudoromyia magnicornis**
 Howard, U. S. R. Ent., 1911, 10.
 Howard, Mass. For. R. 8, 89, 1912.
 Howard & Fiske, U. S. B. 91, 303, 1911.
- Eudryas grata**
 Bethune, Ont. Agr. Coll. B. 158, 30, '07.
- Eufitchia ribearia**, *see* **Cymatophora**
- Eugonia subsignarius**, *see* **Ennomos**
- Eulecanium armeniacum**, *see* **Eulecanium persicae**
- Eulecanium aurantiacum**
 Douglass, Ind. Ent. R. 4, 169, 1912.
- Eulecanium canadense**
 Britton, Conn. R. 5, 238, 1906.
 Fletcher, Ont. Ent. Soc. R. 37, 86, '07.
 Johannsen, Me. B. 187, 10, 1911.
- Eulecanium caryae**
 Douglass, Ind. Ent. R. 4, 170, 1912.
 Jarvis, Ont. Ent. Soc. R. 38; 66, 1908.
 Sanders, J. Ec. Ent. II, 442, 1909.
- Eulecanium cerasifex**
 Britton, Conn. B. 151, 8, 1905.
 Britton, Conn. R. 5, 238, 1906.
 Caesar, Ont. Ent. Soc. R. 44, 53, 1914.
 Fletcher, Ont. Ent. Soc. R. 35, 54, 1905.
 Gossard, Ohio B. 164, 22, 1905.
 Hood, Mass. C. 6, 2, 1907.
 Jarvis, Ont. Ent. Soc. R. 38, 63, 1908.
 Johannsen & Patch, Me. B. 195, 237, 1911.
 Lochhead, Syn. Ec. Ent. 43, 1914.
 Washburn, Minn. R. 11, 22, 1906.
 Washburn, Minn. Ent. R. 11, 57, 1906.
- Eulecanium cerasorum**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 188, 1907.
 Essig, Cal. Hort. B. II, 1-2, 115, 1913.
 Merrill, Cal. Hort. I, 4, 113, 1912.
- Eulecanium cockerelli**
 Douglass, Ind. Ent. R. 4, 171, 1912.
- Eulecanium corni**
 Britton, J. Ec. Ent. IV, 544, 1911.
 Caesar, Ont. Ent. Soc. R. 42, 31, 1912.
 Douglass, Ind. Ent. R. 4, 172, 1912.
 Essig, Cal. Hort. B. II, 1-2, 119, 1913.
 Gossard, Ohio B. 233, 121, 1911.
 Johannsen, Me. B. 207, 445, 1912.
 Jones, U. S. B. 80, 148, 1910.
 Merrill, Cal. Hort. B. I, 4, 113, 1912.
 O'Kane, Inj. Ins. 260, 1914.
 Quayle, Cal. B. 223, 195, 1911.
 Quayle, J. Ec. Ent. IV, 512, 1911.
 Sanders, J. Ec. Ent. II, 443, 1909.
 Slingerland & Crosby, Man. Fr. Ins. 261, 1914.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912.
- Eulecanium crawi**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 190, 1907.
- Eulecanium fasciatum**
 Ehrhorn, Pac. Rur. Press LXXVI, 372, 1908.
- Eulecanium fletcheri**
 Douglass, Ind. Ent. R. 4, 173, 1912.
- Eulecanium hesperidum**, *see* **Coccus**
- Eulecanium kingii**
 Britton, Conn. R. 5, 238, 1906.
- Eulecanium nigrofasciatum**
 Barre & Conradi, S. C. B. 141, 38, 1909.
 Becker, Pr. Ark. Hort. Soc., 1912-1913, 30.
 Bethune, Ont. Agr. Coll. B. 158, 23, '07.
 Britton, Conn. B. 151, 8, 1905.
 Britton, Conn. R. 5, 238, 1906.
 Caesar, Ont. Ent. Soc. R. 40, 18, 1910.
 Caesar, Ont. Ent. Soc. R. 44, 53, 1914.
 Chandler, Mo. Hort. Soc., 1909, 360.
 Chandler, Mo. B. 102, 256, 1912.
 Close & Ballard, Md. B. 159, 189, 1911.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 78, 1913.
 Douglass, Ind. Ent. R. 4, 175, 1912.
 Ehrhorn, Cal. Fr. Grow., Dec. 12, '08, 11.
 Felt, N. Y. St. Mus. Mem. 8, 200, 1905.
 Fulton, Wright & Gregg, Pa. B. 110, 31, 1911.
 Gahan & Weldon, Md. Hort. Soc., 1906, 125, 1907.
 Gahan & Weldon, U. S. B. 67, 37, 1907.
 Gossard, Ohio B. 164, 21, 1905.

- Gossard, O. Farm., June 29, 1907, 644.
 Gossard, J. Ec. Ent. I, 188, 1908.
 Gossard, Ohio B. 198, 58, 1908.
 Haseman, Mo. Hort. Soc., 1911, 259.
 Herrick, Rur. N. Y., 1910, 200.
 Hood, Mass. C. 6, 2, 1907.
 Houser, Ohio B. 194, 178, 1908.
 Jarvis, Ont. Ent. Soc. R. 37, 54, 1907.
 Jarvis, Ont. Ent. Soc. R. 38, 65, 1908.
 Lochhead, Syn. Ec. Ent. 43, 1914.
 Neellie, J. Ec. Ent. II, 192, 1909.
 O'Kane, Inj. Ins. 261, 1914.
 Peairs, Md. Hort. Soc., 1908, 64, 1909.
 Quaintance, U. S. Y. B., 1905, 340.
 Quaintance, Better Fr., June 1909, 19.
 Sanders, Nat'l Fr. Grow., June 1907, 2.
 Sanders, Farm. Guide, Oct. 5, 1907, 4.
 Sanders, U. S. C. 88, 1, 1907.
 Sanders, J. Ec. Ent. II, 446, 1909.
 Sanderson, Ins. Pests, 654, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 293, 1914.
 Smith, U. S. B. 67, 36, 1907.
 Smith, N. J. B. 235, 28, 1911.
 Smith & Lewis, U. S. B. 60, 77, 1906.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 19.
 Surface, Pa. Dept. Agr. R. 117, 1910.
 Symons, Md. Hort. Soc., 1909, 160, '10.
 Symons, Md. Hort. Soc., 1910, 99, 1911.
 Symons & Cory, Md. B. 149, 83, 1910.
 Symons & Cory, Md. B. 175, 172, 1913.
 Symons, Cory & Babcock, Md. B. 161, 221, 1911.
 Taylor, Mo. Fr. Exp. Sta. B. 18, 86, '08.
 Worsham, J. Ec. Ent. II, 206, 1909.
 ——— C. Gentl., 1907, 504.
 ——— Farm. World, Can., 1907, 515.
 ——— U. S. Y. B., 1906, 513.
 ——— U. S. Y. B., 1907, 548, 551.
- Eulecanium nigrofasciatum**, *parasite of*
 Gahan, Md. B. 123, 155, 1907.
- Eulecanium persicae**
 Bentley, Tenn. B. v. XIX, 2, 34, 1906.
 Bethune, Ont. Agr. Coll. B. 158, 23, '07.
 Bremner, Cal. Hort. Comm. Destr. Ins. 25, 1910.
 Britton, Conn. B. 151, 8, 1905.
 Britton, Conn. R. 5, 237, 1906.
 Carnes, Cal. Hort. Comm. R. 2, 187, '07.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 111, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 223, 1907.
 Ehrhorn, Cal. Fr. Grow., Dec. 12, 1908, 11.
 Essig, Cal. Cult. XXXV, 198, 1910.
 Essig, Ventura Co. (Cal.) Hort. Comm. B. 2, 1911.
 Gossard, Ohio B. 198, 58, 1908.
 Hood, Mass. C. 6, 1907.
 Pease, Cal. Cult. XXX, 571, 1908.
 Sanders, J. Ec. Ent. II, 441, 1909.
 Smith, N. J. R., 1905, 533, 588.
 Smith, Ga. Bd. Ent. B. 17, 77, 1905.
 Surface, Pa. D. A. Zoöl. III, 2, 50, 1905.
 Surface, Pa. R. 16, 117, 1910.
 Symons, Md. B. 101, 147, 1905.
 ——— Pac. Rur. Press LXIX, 19, 1905.
 ——— Pac. Rur. Press LXXVII, 63, 1909.
 ——— U. S. Y. B., 1908, 576.
- Eulecanium prunosum**
 Bremner, Cal. Hort. Comm. Destr. Ins., 1910, 25.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 190, 1907.
 Essig, Cal. Cult., XXXV, 198, 1910.
 Essig, Pom. Jr. Ent. III, 404, 1911.
 Essig, Cal. Hort. B. II, 1-2, 115, 1913.
 Quayle, Cal. B. 223, 196, 1911.
 Sanders, J. Ec. Ent. II, 442, 1909.
- Eulecanium prunastri**
 Gossard, Ohio B. 198, 58, 1908.
 Gossard, Ohio B. 233, 121, 1911.
 Sanders, J. Ec. Ent. II, 446, 1909.
- Eulecanium pubescens**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 191, 1907.
- Eulecanium quercifex**
 Felt, N. Y. R. 21, 101, 1906.
 Gee, J. Ec. Ent. V, 484, 1912.
 Sanders, J. Ec. Ent. II, 445, 1909.
 Turner, Ala. Poly. C. 28, 106, 1914.
- Eulecanium sp. on apple**
 Popenoe, Kans. Farm., June 14, '06, 641.
- Eulecanium sp. on pecan**
 Gossard, U. S. Y. B., 1907, 548, 551.
- Eulecanium sp. on plum**
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 83, 1913.
- Eulecanium spp.**
 Cundiff, Cal. Hort. Comm. C. Feb. '06, 6.
 Haseman, Mo. Hort. Soc., 1911, 251.

Eulecanium tulipiferae

- Britton, Conn. B. 151, 9, 1905.
 Britton, Conn. R. 239, 1906.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 192, 1907.
 Douglass, Ind. Ent. R. 1, 80, 1908.
 Douglass, Ind. Ent. R. 4, 177, 1912.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 23, 1907.
 Felt, N. Y. St. Mus. Mem. 8, 208, 1905.
 Hood, Mass. C. 6, 3, 1907.
 Houser, Ohio B. 194, 180, 1908.
 Smith, N. J. B. 181, 16, 1905.
 Smith, N. J. R., 1906, 572.
 Smith, N. J. R., 1910, 347.
 Weiss, N. J. R., 1912, 426.
 ——— C. Gentl., 1906, 754.
 ——— C. Gentl., 1910, 840.

Eulia politana

- Felt, N. Y. St. Mus. Mem. 8, 681, 1906.

Eulia quadrifasciana

- Johannsen, Me. B. 207, 454, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 66, 1914.

Eulia triferana

- Felt, N. Y. St. Mus. Mem. 8, 532, 1906.
 Forbes, Ill. Ent. R. 23, 175, 1905.

Eumenes bollii

- Quaintance & Brues, U. S. B. 50, 111, 1905.

Eumerus strigatus

- Felt, N. Y. R. 27, 119, 1912.

Eumicrosoma benefica

- McColloch, J. Ec. Ent. VII, 219, 1914.

Eunotus lividus

- Cotton, Ohio Nurs. Orch. Insp. B. 7, 25, 1906.
 Johnson, Colo. B. 116, 11, 1906.
 Sanders, U. S. C. 64, 4, 1905.
 Smith, N. J. R., 1905, 606.

Eunotus sp.

- Patch, Me. B. 121, 171, 1905.

Euonymus scale, see Chionaspis euonymi**Eupelmus allynii**

- Burgess, U. S. B. 60, 71, 1906.
 Gossard & Houser, Ohio B. 177, 31, '06.
 Kelly, J. Ec. Ent. III, 202, 1910.
 Webster, U. S. C. 70, 12, 1906.
 Webster, U. S. B. 67, 97, 1907.
 Webster, U. S. C. 66, Rev. Ed., 4, '08.
 Webster, U. S. C. 106, 8, 1909.

Eupelmus mirabilis

- Essig, Cal. Hort. B. II, 1-2, 274, 1913.
 Isaac, Bug vs. Bug, 23, 1906.

Eupelmus reduvii

- Chittenden, U. S. C. 39, 2nd Ed., 4, '08.

Eupelmus sp. on Tmetocera

- Scott & Paine, U. S. D. A. B. 113, 11, 1914.

Eupeodes volucris

- Davidson, U. S. D. A. B. 100, 37, 1914.
 Russell, U. S. D. A. B. 90, 10, 1914.
 Webster & Phillips, U. S. B. 110, 130, 1912.

Euphoria aurata

- Britton, Conn. R. 9, 374, 1910.

Euphoria inda

- Chittenden, Ins. Inj. Veg. 209, 1907.
 Cooley, Mont. B. 88, 87, 1912.
 Cooley, Mont. B. 92, 61, 1912.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 45, 1906.

- Gossard, Ohio B. 233, 75, 1911.
 Johannsen, Me. B. 177, 39, 1910.
 O'Kane, Inj. Ins. 323, 1914.
 Pettit, Mich. B. 233, 212, 1906.

- Pettit, Mich. B. 258, 296, 1910.
 Sherman, N. C. Dept. Agr. B., 29, 6, 53, 1908.

- Slingerland & Crosby, Man. Fr. Ins. 298, 1914.

Euphoria kernii

- Hunter, Pratt & Mitchell, U. S. B. 113, 32, 1912.

Euphoria melancholia

- Sherman, N. C. Dept. Agr. B. 29, 6, 53, 1908.

- Slingerland & Crosby, Man. Fr. Ins. 298, 1914.

Euphoria spp.

- Forbes, Ill. Ent. R. 23, 99, 1905.

Euphorocera claripennis

- Howard & Chittenden, U. S. C. 96, 5, 1907.

- Howard & Fiske, U. S. B. 91, 145, 1911.

- Marsh, U. S. B. 127, 17, 1913.

- Swenk, Nebr. R. 24, 29, 1911.

- Webster, J. Ec. Ent. IV, 181, 1911.

- Wildermuth, U. S. C. 133, 7, 1911.

- Wildermuth, U. S. D. A. B. 124, 25, '14.

Eupithecia implicata

- Gossard, Ohio B. 198, 72, 1908.

- Eupithecia miserulata**
 Franklin, Ent. News, 1907, 19.
- Euplectrus comstocki**
 Quaintance & Brues, U. S. B. 150, 122, 1905.
- Euproctis chrysorrhoea**
 Armstrong, Vt. Hort. Soc. 8th R. 103, 1911.
 Atwood, J. Ec. Ent. III, 71, 1910.
 Bailey, Vt. Agr. R. 5, 18, 1913.
 Bailey, Vt. Agr. R. 6, 25, 1914.
 Bailey, Vt. Hort. Soc. 11th R. 16, 1914.
 Ball & Titus, Utah Hort. Comm. Bien R. f., 1909-1910, 52, 1911.
 Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 40.
 Blanchard & Horvath, Mass. G. & B-T R. 3, 200, 1908.
 Bremner, Cal. Hort. B. I, 5, 159, 1912.
 Briggs, Pa. Dept. Agr. R. 15, 667, 1909.
 Briggs, Pa. Hort. Assoc. Pr. 54th Meet., 1910, 93.
 Britton, Conn. B. 153, 8, 1906.
 Britton, Conn. Ent. R. 7, 313, 1907.
 Britton, J. Ec. Ent. III, 435, 1910.
 Britton, Conn. R. 10, 683, 1911.
 Britton, J. Ec. Ent. IV, 261, 1911.
 Britton, J. Ec. Ent. V, 465, 1912.
 Britton, Conn. B. 182, 3, 1914.
 Britton, J. Ec. Ent. VII, 250, 1914.
 Britton & Caffrey, Conn. R. 11, 281, '12.
 Britton & Caffrey, Conn. R. 12, 229, '13.
 Britton & Caffrey, Conn. R. 13, 204, '14.
 Bruner, Nebr. Farm., Apr. 21, 1909, p. 432.
 Bruner, Nebr. Ins. Pest Bur. C. 12, 2, 1908.
 Bruner, Nebr. Bd. Agr. R. f., 1909, 231.
 Burgess, J. Ec. Ent. VII, 83, 1913.
 Burgess, U. S. F. B. 564, 7, 1914.
 Clark, Mass. G. & B-T R. 1, 128, 1906.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 42, 1906.
 Douglass, Ind. Ent. R. 2, 55, 1910.
 Ehrhorn, Mass. G. & B-T 3, 207, 1908.
 Ehrhorn, Pac. Rur. Press LXXVI, 372, 1908.
 Ellsworth, Mass. Bd. Agr. R. 55, xxii, 1908.
 Felt, C. Gentl.; 1905, 962.
 Felt, N. Y. R. 20, 385, 1905.
 Felt, N. Y. St. Mus. Mem. 8, 163, 1905.
 Felt, Pr. N. Y. Fr. Grow. Assoc., 4th East. Meet., 126, 1906.
 Felt, Pr. N. Y. Fr. Grow. Assoc., 5 Meet., 71, 1906.
 Felt, N. Y. St. Mus. B. 103, 14, 1906.
 Felt, N. Y. R. 22, 45, 1907.
 Felt, Pr. N. Y. Fr. Grow. Assoc., 6 Meet., 26, 1907.
 Felt, Pr. N. Y. Fr. Grow. Assoc., 5th East. Meet., 148, 1907.
 Felt, Rur. N. Y., 1907, 86.
 Felt, U. S. B. 67, 39, 1907.
 Felt, Mass. G. & B-T R. 3, 210, 1908.
 Felt, J. Ec. Ent. II, 80, 307, 1909.
 Felt, N. Y. R. 24, 45, 1909.
 Felt, N. Y. R. 25, 17, 1910.
 Felt, C. Gentl., Apr. 13, 1911, 358.
 Fernald, Mass. R. 17, 114, 1905.
 Fernald, Mass. R. 18, 151, 1906.
 Fernald, Mass. G. & B-T R. 2, 117, '07.
 Fernald, Mass. B. 125, 61, 1908.
 Fernald, Mass. R. 22, II, 72, 1910.
 Fernald & Fernald, Mass. R. 17, 114, '05.
 Fletcher, Mass. G. & B-T R. 3, 204, '08.
 Forbes, Mass. G. & B-T R. 3, 217, 1908.
 Forbes, Ill. Hort. Soc. f., 1909, 96.
 Forbes, Ill. B. 151, 476, 1911.
 Forbes, Ill. Ent. R. 26, 14, 1911.
 Froggatt, Mass. G. & B-T R. 3, 201, '08.
 Gardner, Me. Comm. Agr. R., 1911, 51, 1912.
 Gardner, Me. Comm. Agr. R. f. '11, 51.
 Gibson, Ent. Soc. Ont. R. 40, 19, 1910.
 Gillette, Colo. C. 1, Apr. 1910.
 Gillette, Colo. Fr. Grow., July 1910, 13.
 Gilman, Me. Pom. Soc., 1904-1905, 117.
 Gilman, Me. Dept. Agr. Quart. B. vol. IV, 1, 2, 1905.
 Gilman, Me. Dept. Agr. Quart. B. vol. IV, 4, 101, 1905.
 Hawes & Chandler, Vt. B. 176, 75, 1914.
 Headlee, N. J. Hort. Soc., 1913, 55.
 Herriek, Household Ins. 432, 1914.
 Hewitt, Farm & Dairy, Can., Jan. 20, 1910, 8.
 Hewitt, Ont. Ent. Soc. R. 41, 28, 1911.
 Heymons, Mass. G. & B-T R. 3, 198, 1908.
 Hitchings, Me. Dept. Agr. Quart. B. vol. IV, 4, 111, 1905.
 Hitchings, Me. Agr. Comm. R., 1905, 201, 1906.

Euproctis chrysorrhoea (*Cont'd*)

- Hitchings, Me. Ent. R. 1, 3, 1906.
 Hitchings, Me. Comm. Agr. R., 1906, 191, 1907.
 Hitchings, Me. Ent. R. 2, 21, 1907.
 Hitchings, Me. Comm. Agr. R., 1907, 218, 1908.
 Hitchings, Me. Ent. R. 3, 14, 1908.
 Hitchings, Me. Ent. R. 4, 14, 1909.
 Hitchings, Me. Comm. Agr. R., 1909, 296, 1910.
 Hitchings, Me. Ent. R. 5, 11, 16, 1910.
 Hitchings, Me. Comm. Agr. R., 1910, 51, 1911.
 Hitchings, Me. Ent. R. 6, 9, 1911.
 Howard, U. S. Y. B., 1905, 123.
 Howard, Mass. G. & B-T R. 1, 124, '06.
 Howard, U. S. F. B. 264, 7, 1906.
 Howard, U. S. R. Ent., 1907, 11.
 Howard, U. S. R. Ent., 1908, 9.
 Howard, U. S. R. Ent., 1909, 6.
 Howard, U. S. R. Ent., 1911, 9.
 Howard, U. S. R. Ent., 1912, 6.
 Howard, U. S. R. Ent., 1914, 1.
 Houser, Ohio B. 194, 187, 1908.
 Johannsen, Me. B. 177, 24, 1910.
 Johannsen, Me. B. 207, 451, 1912.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 352.
 Johannsen & Patch, Me. B. 195, 240, '11.
 Jones, O. Farm., Oct. 3, 1914, 299.
 Kirkland, Amer. Jr. Pub. Hygiene, 1905, 397.
 Kirkland, Me. Dept. Agr. Quart. B., vol. IV, 1, 9, 1905.
 Kirkland, Mass. G. & B-T B. 1, 10, '05.
 Kirkland, Mass. G. & B-T R. 1, 1906.
 Kirkland, Mass. G. & B-T R. 2, 1907.
 Kirkland, Mass. G. & B-T R. 3, 1908.
 Kirkland, Ont. Ent. Soc. R. 38, 27, '08.
 Kirkland, Mass. G. & B-T R. 4, 1909.
 Lamson, Conn. Storrs B. 71, 81, 1912.
 Loehhead, Syn. Ec. Ent. 65, 1914.
 Lounsbury, Mass. G. & B-T R. 3, 193, 1908.
 Marlatt, U. S. C. 58, 10, 1905.
 Marlatt, U. S. F. B. 453, 1911.
 Mead, Rur. N. Y., 1910, 321.
 Melander, Wash. Hort. Assoc., 8th R. 151, 1912.
 Morgan, Mass. G. & B-T R. 3, 213, '08.
 Morgan, Tenn. Bd. Ent. R. f. 1908, 18.
 Morgan, Tenn. Bd. Ent. R. f. 1910, 25.
 Munson, Me. B. 128, 67, 1906.
 O'Kane, N. H. Moth C. 2, 1912.
 O'Kane, Inj. Ins. 292, 1914.
 Osborn, Mass. G. & B-T R. 3, 214, '08.
 Patch, Me. B. 108, 154, 1905.
 Patch, Me. Pom. Soc., 1904-1905, 110.
 Patch, Me. B. 109, 179, 1905.
 Patch, Me. B. 123, 221, 1905.
 Patch, Me. B. 134, 209, 1906.
 Patch, Me. B. 134, 213, 1906.
 Patch, Me. B. 148, 261, 1907.
 Patch, Me. B. 162, 352, 1908.
 Powell, Rur. N. Y., 1909, 718.
 Pratt, Mass. Bd. Agr. R. 55, 181, 1908.
 Rane, Mass. For. R. 6, 67, 1909.
 Rane, Mass. For. R. 7, 67, 1910.
 Rane, J. Ec. Ent. III, 36, 1910.
 Rane, N. H. Hort. Soc., 1910, 75.
 Rane, Mass. For. R. 8, 81, 1911.
 Rane, Mass. For. R. 9, 65, 1912.
 Rane, Mass. For. R. 10, 75, 1913.
 Rogers, J. Ec. Ent. VII, 116, 1914.
 Rogers & Burgess, U. S. B. 87, 9, 1910.
 Sanderson, N. H. R. 17-18, 315, 1906.
 Sanderson, U. S. B. 60, 75, 1906.
 Sanderson, N. H. Bd. Agr. R., 1905-1907, 288.
 Sanderson, N. H. B. 129, 263, 1907.
 Sanderson, J. Ec. Ent. III, 211, 1910.
 Sanderson, Ins. Pests, 558, 1912.
 Schoene, N. Y. St. Tech. B. 30, 1913.
 Schoene & Fulton, N. Y. St. C. 25, 10, 1913.
 Selleck, Rur. N. Y., 1909, 766.
 Severin, Mass. G. & B-T R. 3, 202, '08.
 Shaw, Ohio Nurs. Orch. Insp. B. 10, 5, 1909.
 Shaw, Ohio St. Bd. Agr. R. 64, 1909, 629.
 Shaw, Ohio Nurs. Orch. Insp. R. 8, 19, 1910.
 Sherman, Prog. Farm., Mar. 18, '09, 19.
 Silvestri, Mass. G. & B-T R. 4, 66, '09.
 Slingerland, Mass. G. & B-T R. 3, 222, 1908.
 Slingerland, N. Y. Fr. Grow. Assoc., 1909, 123.
 Slingerland & Crosby, Man. Fr. Ins. 135, 1914.
 Smith, N. J. R., 1905, 537, 556.
 Smith, Mass. G. & B-T R. 3, 219, 1908.
 Smith, N. J. Bd. Agr. R. 36, 160, 1909.

Euproctis chrysorrhoea (*Cont'd*)

- Smith, N. J. Bd. Agr. R. 37, 192, 1910.
 Smith, N. J. R., 1911, 405.
 Smith, N. J. Bd. Agr. R. 38, 54, 1911.
 Stene, R. I. Nurs. Insp., 1906, 39.
 Stene, Comm. Suppr. G. & B-T Moths R. f. 1906.
 Stene, R. I. G. & B-T C. i, 12, 1906.
 Stene, R. I. Bd. Agr. R. 21, 55, 1906.
 Stene, Comm. Suppr. G. & B-T Moths R. f. 1907.
 Stene, R. I. G. & B-T R., 1907, 47, '08.
 Stene, R. I. G. & B-T R., 1906, 74, '09.
 Stene, R. I. Bd. Agr. R. 24, 31, 1909.
 Stene, R. I. Bd. Agr. R. f. 1909, 89.
 Stene, Comm. Suppr. G. & B-T Moths R. f. 1911, 26.
 Stene, R. I. R. 1912, Ent. Dept. 6, 1912.
 Stene, R. I. R. 1914, Ent. Dept., 44, '14.
 Stone, Mass. R. 23, II, 47, 1911.
 Stuart, Vt. C. 2, 1909.
 Surface, Pa. D. A. Zool. VI, 10, 336, '09.
 Symons, Md. B. 134, 202, 1909.
 Tothill, Ent. Soc. Ont. R. 43, 57, 1913.
 Tyzzer, 2nd R. Supt. Gyp. B-T. Moths, 1907, 154.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 481, 1911.
 Washburn, Minn. Ent. R. 13, 72, 1910.
 Wilson, Oreg. Bien. Crop Pest R. f., 1911-1912, 168.
 Woodward, Rur. N. Y., 1905, 107.
 ——— Agr. Gaz. Can., Aug. '14, 622.
 ——— Amer. Cult., Aug. 14, 1909, 11.
 ——— Cal. Hort. Comm. Bien. R. 2, 236, 1907.
 ——— C. Gentl., 1905, 228.
 ——— C. Gentl., 1907, 504.
 ——— C. Gentl., 1909, 266.
 ——— Conn. Farm., Feb. 13, 1909, 4.
 ——— Mass. G. & B-T R. 4, 1909.
 ——— N. Eng. Farm., Nov. 17, '06, p. 3.
 ——— R. I. Bd. Agr. R. 28, 13, 1913.
 ——— R. I. Bd. Agr. R. 29, 11, 1914.
 ——— Rur. N. Y., 1910, 351.
 ——— U. S. Y. B., 1905, 635.
 ——— U. S. Y. B., 1906, 514.
 ——— U. S. Y. B., 1907, 549.
 ——— U. S. Fed. Hort. Bd. Quar. Not. 4, 1912.
 ——— U. S. Fed. Hort. Bd. Quar. Not. 10, 1913.
 ——— U. S. Fed. Hort. Bd. Quar. Not. 17, 1914.
Euproctis chrysorrhoea, dermatitis
 Tyzzer, Mass. G. & B-T R. 2, 154, '07.
Euproctis chrysorrhoea, fungus of
 Hitchings, Me. Comm. Agr. R., 1908, 206, 1909.
 Kirkland, Mass. G. & B-T R. 4, 53, '09.
 Speare & Colley, Spec. R., '12 (Boston).
Euproctis chrysorrhoea, legislation
 ——— Conn. Exp. Sta. R. 7, 300, 1908.
Euproctis chrysorrhoea, parasites
 Howard, U. S. R. Ent., 1905, 281.
 Howard, U. S. R. Ent., 1906, 9.
 Howard, Mass. G. & B-T R. 3, 173, '08.
 Howard, Mass. G. & B-T R. 4, 70, '09.
 Howard, Ent. Soc. Ont. R. 39, 121, '09.
 Howard, U. S. R. Ent., 1910, 10.
 Howard & Fiske, U. S. B. 91, 13, 1911.
Euproctis chrysorrhoea, quarantine
 ——— Me. Comm. Agr. R. f., 1912, 76.
Eupsalis minuta
 Felt, N. Y. St. Mus. Mem. 8, 261, 1905.
 Hopkins, U. S. B. 58, 60, 1909.
 Hopkins, U. S. C. 126, 1, 1910.
 ——— U. S. Y. B., 1905, 632.
Eupsephoectes procinctus
 Treherne, Pr. Ent. Soc. B. C. 4, 30, 1914.
Euptoieta claudia
 Gibson, Ont. Ent. Soc. R. 36, 120, 1906.
European bark-beetle destroyer, see *Thanasimus formicarius*
European bean-weevil, see *Bruchus rufimanus*
European elm scale, see *Gossyparia spuria*
European fruit lecanium, see *Lecanium corni*
European fruit-scale, see *Aspidiotus ostreiformis*
European grain-aphis, see *Siphocoryne avenae*
European grain-moth, see *Tinea granella*
European peach scale, see *Lecanium persicae*
European pear scale, see *Epidiaspis piricola*
Eurosta solidaginis
 Johannsen, Me. B. 187, 5, 1911.
Eurycreon rantalis
 Smith, N. J. R., 1911, 414.
Eurymus eurytheme
 Gillette, S. W. Stockm., Aug. 26, '10, 1.

- O'Kane, Inj. Ins. 175, 1914.
 Westgate, McKee & Evans, U. S. F. B. 495, 30, 1912.
 Wildermuth, U. S. C. 133, 1, 1911.
 Wildermuth, U. S. D. A. B. 124, 1, 1914.
- Eurymus philodice**
 Garman, Ky. B. 125, 45, 1906.
 Gossard, Ohio B. 233, 80, 1911.
 Pettit, Mich. B. 258, 281, 1910.
- Eurypelma hentzi**
 Herrick, Household Ins. 401, 1914.
- Eurytoma gigantea**
 Johannsen, Me. B. 187, 9, 1911.
- Eurytoma sp.**
 Brooks, W. Va. B. 119, 329, 1909.
 Rumsey, W. Va. R. f., 1909-1910, 68.
- Eurytoma sp. on boll weevil**
 Hunter & Pierce, U. S. B. 114, 141, 1912.
 Pierce, U. S. B. 100, 50, 1912.
- Eurytoma sp. on plum curculio**
 Quaintance & Jenne, U. S. B. 103, 148, 1912.
- Eurytoma sp. on Tmetocera**
 Scott & Paine, U. S. D. A. B. 113, 11, '14.
- Eurytoma tyloderma**
 Chittenden, U. S. B. 82, 89, 1911.
 Hunter & Pierce, U. S. B. 114, 141, 1912.
 Pierce, J. Ec. Ent. I, 119, 1908.
 Pierce, U. S. B. 73, 29, 34, 1908.
 Pierce, U. S. B. 100, 49, 1912.
 Tucker, U. S. B. 64, 64, 1909.
- Euschistus fissilis**
 Felt, N. Y. St. Mus. Mem. 8, 610, 1906.
 Forbes, Ill. Ent. R. 23, 195, 1905.
- Euschistus impictiventris**
 Morrill, U. S. B. 86, 74, 1910.
- Euschistus politus**
 Felt, N. Y. St. Mus. Mem. 8, 612, 1906.
- Euschistus punctipes**
 Sanderson, Ins. Pests, 225, 1912.
- Euschistus servus**
 Forbes, Ill. Ent. R. 23, 195, 1905.
 Hinds, U. S. B. 59, 29, 1906.
 Morrill, U. S. B. 86, 75, 1910.
- Euschistus tristigmus**
 Felt, N. Y. St. Mus. Mem. 8, 612, 1906.
 Morrill, U. S. B. 86, 74, 1910.
 Patch, Me. B. 148, 276, 1907.
- Euschistus variolarius**
 Felt, N. Y. St. Mus. Mem. 8, 611, 1906.
 Folsom, Ill. B. 134, 147, 1909.
- Forbes, Ill. Ent. R. 23, 195, 1905.
 Watson, Fla. B. 112, 38, 1912.
- Eusemion longipenne**
 Timberlake, J. Ec. Ent. VI, 301, 1913.
- Eustilbus apicalis**
 Forbes, Ill. Ent. R. 23, 180, 1905.
- Eustroma diversilineata**
 Gossard, Ohio B. 233, 141, 1911.
- Eutelus flavipes**
 Burke, Pr. Ent. Soc. Wash. VII, 89, '05.
 Burke, U. S. C. 61, 7, 8, 1905.
- Eutettix clarivida**
 Ball, U. S. B. 66, 50, 1909.
- Eutettix insana**
 Ball, U. S. B. 66, 50, 1909.
- Eutettix scitula**
 Ball, U. S. B. 66, 49, 1909.
- Eutettix seminuda**
 Ball, U. S. B. 66, 50, 1909.
- Eutettix stricta**
 Ball, U. S. B. 66, 50, 1909.
 ——— U. S. Y. B., 1905, 630.
- Eutettix strobi**
 Ball, U. S. B. 66, 49, 1909.
- Eutettix tenella**
 Adams, Cal. Cult., XLI, 259, 1913.
 Ball, Utah R. 16, XVI, 1905.
 Ball, Deseret Farm., July 21, 1906, 1.
 Ball, U. S. B. 66, 33, 1909.
 Chittenden, Ins. Inj. Veg. 128, 1907.
 O'Kane, Inj. Ins. 195, 1914.
 Sanderson, Ins. Pests, 339, 1912.
- Euthochtha galeator**
 Garman, Ky. B. 133, 55, 1908.
- Euthrichopsis agromyzae**
 Webster & Parks, J. Agr. Res. I, 74, '13.
- Euthrips citri**
 Bremner, Cal. Hort. Comm. Destr. Ins. 1910, 17.
 Essig, Cal. Hort. B. II, 102, 33, 1913.
 Howard, U. S. R. Ent., 1909, 33.
 Howard, U. S. R. Ent., 1910, 31.
 Howard, U. S. R. Ent., 1911, 31.
 Howard, U. S. R. Ent., 1912, 33.
 Jones & Horton, U. S. B. 99, 1, 1911.
 Jones & Horton, Pac. Rur. Press, LXXXI, 293, 1911.
 Morrill, S. W. Stockm., Apr. 25, '12, 3.
 Morrill, Cal. Hort. B. I, 5, 162, 1912.
 Morrill, J. Ec. Ent. VI, 189, 1913.
 Morrill, S. W. Stockm., May 16, 1913, 10.

- Morrill, Ariz. Comm. Agr. & Hort. R. 6, 31, 1914.
 Moulton, Tech. B. 12, pt. 7, U. S. Bur. Ent. 1909.
 Quayle, Cal. B. 214, 491, 1911.
 Shamel, Cal. Cult. XXXIV, 259, 1910.
 ——— U. S. Y. B., 1908, 576.
- Euthrips fasciatus**, *see* **Heliothrips**
- Euthrips fuscus**
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 120, 1905.
 Hooker, U. S. C. 68, 1, 1906.
 Hooker, U. S. B. 65, 5, 1907.
 McGregor, U. S. C. 150, 9, 1912.
 McGregor, U. S. C. 172, 16, 1913.
 Morgan, U. S. Y. B., 1910, 290.
 O'Kane, Inj. Ins. 204, 1914.
 Sanderson, Ins. Pests, 240, 1912.
 Shaw, U. S. D. A. B. 104, 2, 1914.
 ——— U. S. Y. B., 1905, 631.
 ——— U. S. Y. B., 1906, 509, 542.
 ——— U. S. Y. B., 1908, 569.
- Euthrips nervosus**
 Hewitt, Ent. Soc. Ont. R. 42, 63, 1912.
- Euthrips nicotianae**, *see* **E. fuscus**
- Euthrips occidentalis**
 Coit, Ariz. B. 58, 319, 1908.
 Jones & Horton, U. S. B. 99, 2, 1911.
 McGregor, U. S. C. 150, 9, 1912.
 McGregor, U. S. C. 172, 16, 1913.
 Quayle, Cal. B. 214, 291, 1911.
 ——— S. W. Stockm., Mar. 5, 1909, 3.
- Euthrips pyri**
 Baldwin, Ind. Ent. R. 5, 95, 1912.
 Bremner, Cal. Hort. Comm. Destr. Ins. 1910, 17.
 Ehrhorn, Cal. Hort. Comm., Bien. R. 2, 229, 1907.
 Essig, Cal. Hort. B. II, 1-2, 35, 1913.
 Felt, N. Y. R. 28, 70, 1913.
 Felt, N. Y. Fr. Grow. Assoc., 1914, 23.
 Foster, Pac. Rur. Press, LXXXI, 73, 1911.
 Foster, Wash. Hort. Assoc., 9th R. 106, 1913.
 Foster & Jones, U. S. C. 131, 1911.
 Hammar, Cal. Cult. XL, 329, 1913.
 Hanna, Cal. Cult. XXXIV, 198, 1910.
 Hanna, Pac. Rur. Press, LXXXI, 349, 1911.
 Howard, U. S. R. Ent., 1908, 21.
 Howard, U. S. R. Ent., 1909, 23.
- Howard, U. S. R. Ent., 1910, 21.
 Howard, U. S. R. Ent., 1911, 19.
 Howard, U. S. R. Ent., 1912, 23.
 Howard, U. S. R. Ent., 1914, 4.
 Jones, Pac. Rur. Press, LXXXIII, 244, 1912.
 Merrill, Cal. Cult., XXXVII, 644, 1911.
 Merrill, Pac. Rur. Press, LXXXII, 532, 1911.
 Merrill, Cal. Hort. B. I, 6, 225, 1912.
 Merrill, Cal. Fr. Grow., Feb. 17, 1912, 5.
 Merrill, Cal. Fr. Grow., Feb. 24, 1912, 4.
 Merrill, Cal. Hort. B. I, 2, 51, 1912.
 Morris, Cal. B. 228, 367, 1912.
 Morris, Cal. Fr. Grow., Sept. 2, 1911, 6.
 Moulton, Cal. Cult., XXV, 75, 603, '05.
 Moulton, Cal. Fr. Grow., Apr. 8, 1905, 3.
 Moulton, Pac. Rur. Press, LXX, 100, 356, 1905.
 Moulton, Cal. Fr. Grow., Apr. 11, '08, 3.
 Moulton, U. S. B. 80, 51, 1909.
 Moulton, Cal. Cult. XXXIII, 75, 1909.
 Moulton, Cal. Fr. Grow., July 24, '09, 1.
 Moulton, Pac. Rur. Press, LXXVIII, 68, 1909.
 Moulton, U. S. B. 68, 1, 1909.
 Moulton, Cal. Cult. XXXIV, 291, 1910.
 Moulton, Cal. Cult. XXXV, 27, 1910.
 Moulton, Cal. Fr. Grow., July 16, '10, 7.
 Moulton, Pac. Rur. Press, LXXXI, 353, 1911.
 Moulton, Better Fr., Feb. 1912, 27.
 O'Kane, Inj. Ins. 329, 1914.
 Parrott, J. Ec. Ent. V, 184, 1912.
 Parrott, N. Y. St. B. 343, 3, 1912.
 Parrott, Pr. West. N. Y. Hort. Soc., 57 Meet., 126, 1912.
 Parrott, N. Y. Fr. Grow. Assoc., '12, 232.
 Parrott, Pr. West. N. Y. Hort. Soc., 58 Meet., 130, 1913.
 Parrott, J. Ec. Ent. VI, 62, 1913.
 Parrott, N. Y. Fr. Grow. Assoc., '13, 250.
 Quaintance, Cal. Cult. XXXII, 3, '09.
 Quaintance, Pac. Rur. Press, LXXVII, 68, 1909.
 Quaintance, Pr. Ent. Soc. Wash. X, 120, 1909.
 Scott, J. Ec. Ent. VII, 478, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 223, 1914.
 Swett, Pac. Rur. Press, LXXIX, 284, 1910.

Euthrips pyri (*Cont'd*)

- Twight, Cal. Cult., XXXI, 270, 1908.
 Vosler, Cal. Hort. V. III, 1, 45, 1914.
 Whitney, Pac. Rur. Press, LXXXIII, 220, 1912.
 Woodworth, Pac. Rur. Press, LXXIX, 365, 1910.
 ——— Cal. Cult. XXX, 691, 1908.
 ——— Cal. Fr. Grow., Mar. 18, 1905, 1.
 ——— Cal. Fr. Grow., June 20, 1908, 3.
 ——— Cal. Fr. Grow., July 2, 1910, 7.
 ——— Pac. Rur. Press, LXXVI, 405, 1908.
 ——— Pac. Rur. Press, LXXX, 24, '10.
 ——— Pac. Rur. Press LXXXVII, 330, 1914.
 ——— U. S. Y. B., 1905, 633.
 ——— U. S. Y. B., 1907, 547.
 ——— U. S. Y. B., 1908, 575.

Euthrips pyri, *quarantine*

- Cook, Cal. Hort. B. III, 4, 178, 1914.

Euthrips tritici

- Chittenden, Ins. Inj. Veg. 90, 1907.
 Cooley, Mont. B. 64, 44, 1906.
 Essig, Cal. Hort. B. II, 1-2, 32, 1913.
 Essig, Cal. Hort. B. II, 11, 728, 1913.
 Hooker, U. S. B. 65, 1907.
 Jones & Horton, U. S. B. 97, 2, 1911.
 Morrill, Cal. Hort. B. I, 5, 162, 1912.
 Morrill, J. Ec. Ent. VI, 189, 1913.
 Morrill, S. W. Stockm., May 16, '13, 10.
 Morrill, Ariz. Comm. Agr. & Hort. R. 6, 29, 1914.
 Morrill, S. W. Stockm., May 8, 1914, 10.
 Moulton, Cal. Cult. XXV, 75, 1905.
 Moulton, Pac. Rur. Press, LXX, 100, 1905.
 O'Kane, Inj. Ins. 331, 1914.
 Quaintance, U. S. B. 97, 108, 1912.
 Quayle, Cal. B. 214, 492, 1911.
 Shaw, U. S. D. A. B. 104, 2, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 301, 379, 1914.
 Watson, Fla. B. 112, 26, 1912.
 Watson, Fla. Grow., May 18, 1912, 4.
 Watson, Fla. Fr. Grow., June 1, 1912, 4.
 Watson, Fla. R., 1912, lxi.
 Watson, Fla. B. 125, 64, 1914.
 ——— U. S. Y. B., 1905, 631, 636.
 ——— U. S. Y. B., 1907, 546.
 ——— U. S. Y. B., 1908, 578.

Euthyrhynchus floridanus

- Chittenden, U. S. B. 82, 86, 1911.
 Morrill, U. S. B. 86, 82, 1910.
 Sanderson, U. S. B. 57, 49, 1906.

Euura salicis-nodus

- U. S. Y. B., 1908, 577.

Euvanessa antiopa

- Bailey, Vt. Agr. R. 5, 31, 1913.
 Britton, Conn. R. 6, 260, 1907.
 Douglass, Ind. Ent. R. 2, 74, 1910.
 Douglass, Ind. Ent. R. 4, 136, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 158, 1905.
 Felt, N. Y. R. 22, 56, 1907.
 Felt, N. Y. R. 27, 104, 1912.
 Gibson, Ont. Ent. Soc. R. 40, 13, 1910.
 Hitchings, Me. Comm. Agr. R., 1907, 213, 1908.
 Hitchings, Me. Ent. R. 3, 9, 1908.
 Houser, Ohio B. 194, 191, 1908.
 Lochhead, Ont. Ent. Soc. R. 36, 136, 1906.
 Johannsen, Me. B. 207, 450, 1912.
 Johannsen & Patch, Me. B. 195, 240, 1911.
 Patch, Me. B. 123, 214, 1905.
 Patch, Me. B. 134, 224, 1906.
 Ruggles, Minn. R. 15, 56, 1914.
 Sanderson, N. H. R. 17-18, 351, 1906.
 Smith, N. J. R., 1911, 428.
 Surface, Pa. D. A. Zoöl. I, 4, 160, 1911.
 Washburn, Minn. R. 12, 117, 1908.
 Weldon, Colo. Fr. Grow., Aug. '10, 30.
 Woods, Me. B. 137, 289, 1906.

Euxesta annonae

- Quaintance & Brues, U. S. B. 50, 127, 1905.

Euxesta nitidiventris

- Chittenden, U. S. B. 82, 90, 1911.

Euxesta notata

- Chittenden, U. S. B. 64, 38, 1908.
 Essig, Cal. Hort. B. II, 1-2, 249, 1913.
 Smith, N. J. R., 1908, 355.

Euxesta thomae

- Chittenden, U. S. B. 82, 90, 1911.

Euxoa atomaris

- Essig, Cal. Hort. B. II, 1-2, 163, 1913.

Euxoa messoria

- Chittenden, Ins. Inj. Veg. 246, 1907.
 Chittenden, U. S. Y. B., 1912, 332.
 Felt, N. Y. R. 20, 407, 1905.
 Felt, N. Y. R. 22, 53, 1907.
 Fletcher, Ont. Ent. Soc. R. 35, 51, 1905.

- Forbes, Ill. Ent. R. 23, 32, 1905.
 Gibson, Can. Exp. Farms Ent. B. 3, 19, 1912.
 Gibson, Ont. Ent. Soc. R. 43, 12, 1913.
 Gossard, Ohio Hort. Soc., 1914, 109.
 Smith, N. J. B. 229, 13, 1910.
 Symons, Md. B. 101, 176, 1905.
 Young, Ont. Ent. Soc. R. 35, 4, 1905.
 ——— U. S. Y. B., 1906, 510.
- Euxoa ochrogaster**
 Fletcher, Ont. Ent. Soc. R. 35, 51, '05.
 Fletcher, Farm. Advocate, Can., 1907, 1825.
 Forbes, Ill. Ent. R. 23, 34, 1905.
 Gibson, Ont. Ent. Soc. R. 41, 12, 1911.
 Gibson, Ont. Ent. Soc. R. 42, 10, 1912.
 Gibson, Can. Exp. Farms, Ent. B. 3, 15, 1912.
 Gibson, Ont. Ent. Soc. R. 43, 12, 1913.
 Gregson, U. S. B. 67, 125, 1907.
 Young, Ont. Ent. Soc. R. 35, 4, 1905.
 Young, Ont. Ent. Soc. R. 36, 7, 1906.
 Young, Ont. Ent. Soc. R. 37, 15, 1907.
- Euxoa perexcellens**
 Gibson, Can. Exp. Farms Ent. B. 3, 25, 1912.
- Euxoa punctigera**
 Chittenden, U. S. Y. B., 1912, 332.
 ——— U. S. Y. B., 1906, 510.
- Euxoa ridingsiana**
 Doten, Nev. R. f., 1911, 35.
- Euxoa rubefactalis**
 Cooley, Mont. B. 64, 40, 1906.
 ——— U. S. Y. B., 1906, 510.
- Euxoa scandens**
 Fletcher, Ont. Ent. Soc. R. 35, 51, '05.
 Gibson, Can. Exp. Farms Ent. B. 3, 20, 1912.
- Euxoa sp.**
 Doten, Nev. R. f., 1912, 38.
- Euxoa tessellata**
 Chittenden, U. S. Y. B., 1912, 332.
 Forbes, Ill. Ent. R. 23, 34, 1905.
 ——— U. S. Y. B., 1906, 510.
- Euzophora semifuneralis**
 Slingerland & Crosby, Man. Fr. Ins. 253, 1914.
- Evania appendigaster**
 Marlatt, U. S. C. 51 Rev., 11, 1908.
- Evarthrus obsoletus**
 Quaintance & Jenne, U. S. B. 103, 154, 1912.
- Evarthrus orbatus**
 Quaintance & Jenne, U. S. B. 103, 154, 1912.
- Evarthrus sodalis**
 Hunter & Pierce, U. S. B. 114, 137, '12.
 Newell & Treherne, J. Ec. Ent. I, 244, 1908.
 Pierce, U. S. B. 100, 68, 1912.
- Evarthrus sp. on boll weevil**
 Hunter & Pierce, U. S. B. 114, 137, '12.
- Evergestis rimosalis**
 Chittenden, Ins. Inj. Veg. 140, 1907.
 Chittenden, Va. Truck Exp. Sta. B. 2, 39, 1909.
 O'Kane, Inj. Ins. 177, 1914.
 Rumsey, W. Va. R. f. 1909-1910, 84.
 Rumsey & Brooks, W. Va. B. 120, 350, 1909.
 Sanborn, Okla. B. 100, 18, 1912.
 Sanderson, Ins. Pests, 362, 1912.
 Smith, N. C. R. 33, 33, 1910.
 ——— U. S. Y. B., 1908, 571.
- Evergestis straminealis**
 Fletcher, Can. Exp. Farms, B. 52, 38, 1905.
 Young, Ont. Ent. Soc. R. 35, 4, 1905.
- Everyx myron, see Darapsa**
- Evetria austriana**
 Cosens, Can. Ent., 1906, 362.
- Evetria buoliana**
 Busck, J. Ec. Ent. VII, 340, 1914.
- Evetria comstockiana**
 Felt, N. Y. St. Mus. Mem. 8, 407, 1906.
 Loveland, R. I. R. 1911, Ent. Dept. 13, 1911.
- Evetria frustrana**
 Felt, N. Y. St. Mus. Mem. 8, 405, 1906.
 Loveland, R. I. R., 1911, Ent. Dept. 12, 1911.
 Swenk, Nebr. Hort. Soc., 1909, 112.
 Swenk, Forest Quart., Dec. 1910, 413.
- Evetria rigidana**
 Felt, N. Y. St. Mus. Mem. 8, 407, 1906.
- Evippe prunifoliella**
 ——— U. S. Y. B., 1906, 512.
- Evotus naso**
 Chase, Wash. Hort. Assoc., 7th R. 91, 1911.
- Evoxysoma vitis**
 Gossard, Ohio B. 233, 142, 1911.
 Johnson & Hammar, U. S. B. 116, 27, 1912.

- Slingerland & Crosby, Man. Fr. Ins. 442, 1914.
- Exartema malanum**
Slingerland & Crosby, Man. Fr. Ins. 46, 1914.
- Exartema permundanum**
Davis, J. Ec. Ent. III, 185, 1910.
Clement, Ont. Dept. Agr. Fr. B. 210, 17, 1913.
Hart, Ill. Ent. R. 26, 94, 1911.
Slingerland & Crosby, Man. Fr. Ins. 321, 1914.
- Excelsior Water-bug, Cockroach and Rat Paste**
——— U. S. D. A. Ins. & Fung. No. 76, 1913.
- Exenterus lophyri**
Swenk, Nebr. R. 24, 27, 1911.
- Exochomus californicus**
Essig, Cal. Hort. B. II, 1-2, 212, 1913.
- Exochomus pilatii**, *see* Axion
- Exochomus quadripustulatus**
Howard, U. S. R. Ent., 1906, 12.
- Exochus albifrons**
Patch, Me. B. 148, 265, 1907.
- Exoprosopa fascipennis**
Forbes, Ill. B. 116, 472, 1907.
- Exorista arvicola**
Parrott & Schoene, N. Y. St. Tech. B. 24, 30, 1912.
- Exorista blanda**
Gill, U. S. B. 116, 102, 1913.
Howard & Fiske, U. S. B. 91, 140, 1911.
- Exorista boarmiae**
Chittenden, U. S. B. 66, 26, 1907.
Howard & Fiske, U. S. B. 91, 145, 1911.
- Exorista cheloniae**, *see* Parexorista
- Exorista futilis**
Hitchings, Me. Ent. R. 3, 11, 1908.
- Exorista nigripalpis**
Gill, U. S. B. 116, 102, 1913.
- Exorista pyste**
Chittenden & Marsh, U. S. B. 109, 31, 1912.
Gill, U. S. B. 116, 102, 1913.
Kirk, Conn. R. 12, 258, 1913.
Titus, U. S. B. 54, 38, 1905.
Walden, Conn. R. 13, 226, 1914.
- Exorista vulgaris**
Johannsen, Me. B. 210, 25, 1913.
- Extra Refined Camphorated Flake Compound**
——— U. S. D. A. Ins. & Fung. No. 14, 1913.
- Extra Refined Chinese Ta Na Camphor Compound**
——— U. S. D. A. Ins. & Fung. No. 15, 1913.
- Eyed elater**, *see* Alaus oculatus
- Eye-spotted bud-moth**, *see* Tmetocera ocellana
- Falcaria bilineata**
Johannsen & Patch, Me. B. 195, 240, 1911.
- Fall army worm**, *see* Laphygma frugiperda
- Fall canker-worm**, *see* Alsophila pometaria
- Fall treatment**
Johnson, Colo. Fr. Grow., Oct. '08, 20.
- Fall webworm**, *see* Hyphantria cunea
- False army worm**, *see* Calocampa nupera
- False chinch bug**, *see* Nysius angustatus
- False maple scale**, *see* Pseudococcus aceris
- Fannia**, *see* Homalomyia
- Feltia annexa**
Chittenden, Ins. Inj. Veg. 53, 1907.
Forbes, Ill. Ent. R. 23, 32, 1905.
Metcalf, N. C. Dept. Agr. Sp. B. 41, '09.
Sherman, N. C. Dept. Agr. B. 35, 5, 17, 1914.
Symons, Md. B. 101, 170, 1905.
——— U. S. Y. B., 1908, 573.
- Feltia ducens**
Gibson, Can. Exp. Farms Ent. B. 3, 25, 1912.
- Feltia gladiaria**
Forbes, Ill. Ent. R. 23, 28, 1905.
Stedman, Mo. Bd. Agr. R. 38, 282, '06.
- Feltia herilis**
Sherman, N. C. Dept. Agr. B. 35, 5, 17, 1914.
- Feltia jaculifera**
Forbes, Ill. Ent. R. 23, 26, 1905.
- Feltia malefida**
Sanderson, U. S. F. B. 223, 5, 1905.
Sanderson, U. S. B. 57, 10, 1906.
——— U. S. Y. B., 1908, 573.
- Feltia subgothica**
Forbes, Ill. Ent. R. 23, 26, 1905.
Sherman, N. C. Dept. Agr. B. 35, 5, 17, 1914.
Stedman, Mo. Bd. Agr. R. 38, 272, '06.
- Feniseca tarquinius**
Patch, Me. B. 134, 217, 1906.

Fern scale, *see* *Hemichionaspis aspidistrae*

Fidia cana

Sanderson, Ent. News, 1906, 212.

Sanderson, Insect Pests, 503, 1912.

Fidia longipes

Johnson & Hammar, U. S. B. 89, 16, '10.

Fidia viticida

Atwood, N. Y. Dept. Agr. Hort. B. I, 13, 1907.

Baldwin, Ind. Ent. R. 5, 106, 1912.

Britton, Conn. R. 10, 709, 1911.

Burgess, Ohio Nurs. Orch. Insp. B. 5, 7, 1905.

Burgess, U. S. B. 52, 54, 1905.

Burgess, Ohio Nurs. Orch. Insp. R. 4, 11, 1906.

Burgess, U. S. B. 60, 72, 1906.

Cooper, Nebr. Farm., June 17, '14, 648.

Dean & Peairs, Kans. Agr. Educ. VI, 2, 90, 1913.

Douglass, Ind. Ent. R. 3, 200, 1910.

Ehrhorn, Pac. Rur. Press, LXXVI, 404, 1908.

Felt, N. Y. R. 20, 364, 1905.

Felt, N. Y. Fr. Grow. Assoc., '05, 27.

Felt, U. S. B. 52, 52, 1905.

Felt, N. Y. R. 21, 58, 1906.

Felt, U. S. B. 60, 90, 1906.

Felt, Grape Belt, 29, May 1906, 1.

Felt, Grape Belt, 24, July 1906, 5.

Felt, N. Y. Fr. Grow. Assoc., 1906, 123.

Felt, N. Y. R. 22, 52, 1907.

Felt, N. Y. Fr. Grow. Assoc., 1907, 28.

Felt, U. S. B. 67, 40, 1907.

Felt, C. Gentl., 1908, 107.

Felt, J. Ec. Ent. I, 149, 1908.

Felt, N. Y. R. 23, 36, 1908.

Felt, N. Y. R. 24, 48, 1909.

Fulton, Wright & Gregg, Pa. B. 110, 25, 1911.

Gladwin, Rur. N. Y., 1913, 428.

Gossard, Ohio B. 233, 137, 1911.

Hartzell, N. Y. St. B. 331, 549, 1910.

Hartzell, J. Ec. Ent. IV, 419, 1911.

Hartzell, Pr. N. Y. Fr. Grow. Assoc., 10 Meet., 152, 1911.

Hartzell, Pr. West. N. Y. Hort. Soc., 57, Meet., 159, 1912.

Howard, U. S. R. Ent., 1908, 21.

Howard, U. S. R. Ent., 1909, 26.

Johnson, U. S. B. 68, 61, 1908.

Johnson, Pa. Dept. Agr. R. 17, 586, '11.

Johnson, U. S. B. 97, 1911.

Johnson & Hammar, U. S. B. 89, 9, '10.

Lochhead, Syn. Ec. Ent. 74, 1914.

O'Kane, Inj. Ins. 224, 1914.

Parrott, N. Y. Fr. Grow. Assoc., '06, 24.

Quaintance & Shear, U. S. F. B. 284, 6, 1907.

Quayle, Pac. Rur. Press, LXXIII, 395, 1907.

Sanderson, Ins. Pests, 501, 1912.

Sill, Pa. Dept. Agr. B. 217, 48, 1912.

Slingerland, N. Y. C. B. 235, 91, 1906.

Slingerland & Crosby, N. Y. C. B. 252, 342, 1908.

Slingerland & Crosby, Man. Fr. Ins. 443, 1914.

Slingerland, Herrick & Crosby, N. Y. C. B. 233, 472, 1910.

Surface, Pa. D. A. Zool. I, 1, 35, 1911.

Swaine, Ont. Ent. Soc. R. 41, 96, 1911.

Symons, Md. B. 101, 152, 1905.

Van Buren & Husted, N. Y. Dept. Agr. B. 24, 480, 1911.

——— U. S. Y. B., 1905, 633.

——— U. S. Y. B., 1906, 513.

——— U. S. Y. B., 1907, 547.

——— U. S. Y. B., 1908, 576.

Fidiobia flavipes

Johnson & Hammar, U. S. B. 89, 51, '10.

Quaintance & Shear, U. S. F. B. 284, 10, 1907.

Field Crop Insects

Webster, U. S. Y. B., 1905, 465.

Fiery ground-beetle, *see* *Calosoma calidum*

Fig eater, *see* *Allorhina nitida*

Fiorinia fioriniae

Davis, Ill. Ent. R. 27, 127, 1912.

Sasscer, Tech. B. 16, pt. 5, U. S. Bur. Ent., 1912.

Fir tree destroyer, *see* *Scolytus subscaber*

Fir weevil, *see* *Pissodes dubius*

Fish oil

Jarvis, Conn. Storrs B. 54, 186, 1903.

Fish-oil soap

Smith, N. J. R., 1905, 609.

Van Slyke & Urner, N. Y. St. B. 257, 434, 1904.

——— U. S. D. A. Ins. & Fung. Bd. Ins. 1, p. 21, 1914.

Flacherie, *see* *Porthetria dispar*, *d'sease of*

Flannel moth, *see* *Lagoa crispata*

Flat grain-beetle, *see* *Laemophloeus pusillus*

- Flat-headed apple-tree borer**, *see* *Chrysobothris femorata*
- Flat-headed hickory borer**, *see* *Dicerca obscura*
- Flat-headed pine bark-borer**, *see* *Chrysobothris dentipes*
- Flavescient clover weevil**, *see* *Sitones flavescens*
- Flea-beetles**
 Conradi, Tex. B. 89, 35, 1907.
 Smith, Ga. Bd. Ent. B. 16, 49, 1905.
 Symons, Md. Hort. Soc., 1908, 174, '09.
- Flea-beetles on cabbage**
 Sherman, N. C. Dept. Agr. B. 32, no. 7, 16, 1911.
- Flea-beetles on potatoes**
 Dickens, Kans. B. 194, 488, 1914.
- Flea-beetles on sugar beets**
 Titus, Deseret Farm., Mar. 28, 1908, 6.
- Flea-beetle on tobacco**
 Johnson, Wis. B. 237, 34, 1914.
- Fleas**
 Baker, Science, XXII, 340, 1905.
 Douglass, Ind. Ent. R. 1, 163, 1908.
 Fox, Pub. Health R. XXIII, 1371, 1908.
 Girault, Ent. News, 1914, 130.
 Gossard, O. Farm., June 17, '11, p. 711.
 Howard, Science, XXVI, 757, 1907.
 Kaupp, Anim. Parasites, 31, 1908.
 Melander, The Ranch, Sept. 1, 1908, 21.
 Mitzmain, Pub. Health R. XXV, 1039, 1910.
 Rosenau, Prevent. Med. 237, 1913.
 Schroeder, Pac. Rur. Press LXXXVI, 133, 1913.
 Smith, Prog. Farm., Apr. 29, 1909, 7.
 Surface, Pa. D. A. Zoöl. III, 12, 393, '06.
 Surface, Pa. D. A. Zoöl. V, 12, 387, 1908.
- Fleas and disease**
 Baker, Science, Sept. 15, 1905, 340.
 Stiles, Osler's Mod. Med. I, 633, 1907.
- Fleas and leprosy**
 Ashmead, Pac. Med. Jr., Dec. '07, 767.
- Fleas and plague**
 Doane, Ins. Disease, 142, 1910.
 Fox, Milit. Surg., June 24, 1909, 528.
 McCoy, Pub. Health R. XXV, 659, '10.
 Mitzmain, Ent. News, 1908, 353.
 Snow, Cal. Bd. Health, 9, 3, 29, 39, 1913.
 ——— Pub. Health R. XXIX, 1133, '14.
- Fleas destroyed by beetles**
 Mitzmain, Pub. Health R. XXV, 396, '10.
- Fleas on Rats**
 Banks, Pub. Health Mar. Hosp. Serv. B. 30, 72, 1910.
 Doane, Can. Ent., 1908, 303.
 Fox, Pub. Health Mar. Hosp. Serv. B. 30, 123, 1910.
 McCoy, Pub. Health R. XXIV, 189, '09.
 McCoy, Pub. Health R. XXIV, 1013, 1909.
 Mitzmain, Ann. Ent. Soc. Am. III, 61, 1910.
 Robinson, Amer. Jr. Pub. Health, IX, 773, 1913.
- Fleas on squirrels**
 McCoy, Pub. Health R. XXIII, 1719, 1908.
 McCoy, Pub. Health R. XXV, 737, '10.
- Fleas, parasite of**
 Mitzmain, Pub. Health R. XXV, 393, 1910.
 Swingle, Jr. Infect. Dis., Mar. 1911, 125.
- Fleas, see also Pulex and Ctenocephalus**
- Flies**
 Aiken, Calif. St. Jr. Med. III, 84, 1905.
 Menger, Tex. Stockm. Farm., Jan. 24, 1906, 1.
 Rosenau, Prevent. Med., 223, 1913.
 ——— C. Gentl., 1909, 883, 975, 999, 1023.
 ——— Iowa Home., July 18, 1912, 1367.
- Flies and anthrax**
 Mitzmain, Bull. 94, Publ. Health Hyg. Lab., 1914.
- Flies and disease**
 Anderson, S. Calif. Practitioner, XXII, 559, 1907.
 Anderson, Med. Record, Nov. 28, 1908, 909.
 Beckwith, Deseret Farm., Aug. 14, 1909, 6.
 Booker, N. C. Health Bd. XXVII, 133, 1912.
 Chapman, Jr. S. Car. Med. Assoc., II, 585, 1907.
 Cobb, S. Calif. Practitioner, XX, 197, 1905.
 Gudger, Science, XXXI, 31, 1910.
 Hamilton, Trans. Amer. Assoc. Prevent Infant Mort. II, 157, 1912.
 Hunter, Iowa Agric., May 1912, 15.
 Hutt, Prog. Farm., May 10, 1913, 586.
 Mason, O. Farm., Mar. 14, 1914, p. 384.

- Nicholson, Deseret Farm., Aug. 12, 1911, 25.
 Pease, L. I. Med. Jr. IV, 469, 1910.
 Pease, Jr. N. Eng. Water Works Assoc., XXV, 17, 1911.
 Riley, Science, XXXI, 263, 1910.
 Stiles, Tex. Bd. Health B. VII, 11, 25, 1913.
- Flies and leprosy**
 Wherry, Jr. Infect. Dis. V, 507, 1908.
- Flies destroyed by ants**
 Stallman, Milit. Surg., XXXI, 325, '12.
- Flies on cattle.**
 Kaupp, Anim. Parasites, 17, 1908.
 Lipp, Utah Farm., Oct. 12, 1912, 187.
 Plumb, Nat'l Stockm. & Farm., July 12, 1913, 4.
 Underwood, Ind. Farm., July 13, '12, 2.
 Williams, S. W. Stockm., Oct. 23, '14, 8.
- Flies, legislation against**
 Herms, Cal. B. 215, 541, 1911.
 ——— Pub. Health R. XXVI, 1388, 1911.
- Flies, repellents for**
 Eckles, Mo. B. 68, 35, 1905.
 Lipp, Farm. Guide, June 6, 1914, 17.
 Roberts, Farm. Guide, June 20, '14, 11.
 Smead, Nat'l Stockm. & Farm., June 15, 1911, 9.
 ——— Prog. Farm., Sept. 12, 1914, 970.
 ——— Rur. Calif., Aug. 1912, 300.
- Flies, traps for**
 Godfrey, Iowa Home., Apr. 17, '13, 844.
 Hodge, J. Ec. Ent. VI, 110, 1913.
 Washburn, Minn. Hort. Soc., '12, 397.
 Washburn, Amer. Cult., July 12, '13, 2.
- Flies, see also Musca**
- Florida red scale, see Chrysomphalus aonidum**
- Florida wax-scale, see Ceroplastes floridensis**
- Flour beetles**
 Howard, U. S. R. Ent., 1908, 34.
- Flour-kerosene emulsion**
 Macoun, Can. Hort. XXX, 110.
- Flour paste**
 Parker, U. S. C. 166, 1913.
- Flowers and insects**
 Britton & Viereck, Conn. R. 5, 207, '06.
- Flowers, insects injurious to**
 Gibson, Ont. Ent. Soc. R. 36, 105, 1906.
- Flower thrips, see Euthrips tritici**
- Fluted scale, see Icerya purchasi**
- Forda occidentalis**
 Smith, Nebr. Bd. Agr. R. f., 1908, 316.
 Swenk, Nebr. Bd. Agr. R. f., 1910, 364.
 Swenk, J. Ec. Ent. IV, 284, 1911.
 Swenk, Nebr. Ent. B. 1, 83, 1913.
- Foreign grain-beetle, see Cathartus advena**
- Forelius maccooki**
 Hunter & Pierce, U. S. B. 114, 140, '12.
 Pierce, U. S. B. 100, 72, 1912.
- Forest insects**
 Burke, U. S. Y. B., 1909, 399.
 Conklin, Forest Leaves, Apr. '10, 116.
 Felt, N. Y. St. Mus. Mem. 8, 1905.
 Felt, J. Ec. Ent. VII, 373, 1914.
 Fyles, Ent. Soc. Ont. R. 36, 56, 1906.
 Hopkins, J. Ec. Ent. II, 49, 1909.
 Hopkins, U. S. B. 58, 1909.
 Hopkins, South. Lumberm., Dec. 24, 1910, 65.
 Hopkins, U. S. C. 125, 1910.
 Hopkins, U. S. C. 126, 1910.
 Hopkins, U. S. C. 127, 1910.
 Hopkins, U. S. C. 128, 1910.
 Hopkins, U. S. C. 129, 1910.
 Hopkins, U. S. C. 143, 1912.
 Hopkins, U. S. C. 159, 1912.
 Sheldon, Rur. Calif., July 1909, 197.
 Spring, Conn. Farm., June 18, 1910, 1.
 Surface, Pa. D. A. Zool. II, 6, 228, '12.
 Swaine, Pr. Ent. Soc. B. C. 3, 41, 1913.
 Swaine, Agr. Gaz. Can., Nov. '14, 861.
 Swaine, Can. Exp. Farms Ent. B. 7, 1914.
 Webb, U. S. Y. B., 1910, 341.
 ——— Agr. Gaz. Can., Sept. 1914, 698.
 ——— Amer. Forest, June 1911, 335.
- Forest products, insects in**
 Hopkins, U. S. C. 128, 1910.
- Forest tent-caterpillar, see Malacosoma disstria**
- Formaldehyde**
 Rosenau, Prevent. Med., 191, 1913.
 Slingerland, Ent. News, 1906, 130.
 ——— U. S. D. A. Ins. & Fung. No. 139, 1914.
 ——— U. S. D. A. Ins. & Fung. Bd. Ins. 2, p. 26, 1914.
- Formica cinereorufibarbis**
 Marsh, U. S. B. 64, 1910.
- Formica fusca**
 Pierce, U. S. B. 100, 73, 1912.

- Smith, N. J. B. 225, 17, 1909.
 Webster, J. Ec. Ent. II, 211, 1909.
- Formica montanus**
 Gill, U. S. B. 116, 102, 1913.
- Formica obscuriventris**
 Davidson, U. S. D. A. B. 100, 20, 1914.
- Formica pallidi-fulva**
 Hunter & Pierce, U. S. B. 114, 140, '12.
 Pierce, U. S. B. 100, 73, 1912.
- Formica rufa**
 Brittain, Pr. Ent. Soc. B. C. 4, 39, 1914.
- Formica rufa obscuripes**
 Hyslop, U. S. B. 95, 117, 1912.
- Formica schaufussi**
 Forbes, Ill. Ent. R. 23, 161, 1905.
 Vickery, U. S. B. 85, 106, 1910.
- Formica subpolita**
 Hunter & Pierce, U. S. B. 114, 140, 1912.
 Hyslop, U. S. B. 95, 118, 1912.
- Formica subsericea**
 Davidson, U. S. D. A. B. 100, 19, 1914.
 Hammar, U. S. B. 80, 110, 1910.
 Parker, U. S. B. 111, 19, 1913.
- Four-horned sphinx, see Ceratomia amyn-
 tor**
- Four-lined plant-bug, see Poecilocapsus
 lineatus**
- Four-marked ash borer, see Eburia
 quadrigeminatus**
- Four-marked leaf-beetle, see Cryptoceph-
 alus quadrimaculatus**
- Four-spined tomicus, see Tomicus integer**
- Four-spotted bean-weevil, see Bruchus
 quadrimaculatus**
- Frankliniella, see Euthrips**
- Frogs, Insect food of**
 Surface, Pa. D. A. Zool. III, 3-4, 134, '13.
- French Bordeaux Mixture**
 ——— U. S. D. A. Ins. & Fung. No. 11,
 1913.
- Frontina archippivora**
 Johannsen, Me. B. 177, 38, 1910.
 Wildermuth, U. S. D. A. B. 124, 24, '14.
- Frontina armigera**
 Quaintance & Brues, U. S. B. 50, 123,
 1905.
- Frontina frenchii**
 Hitchings, Me. Ent. R. 3, 12, 1908.
 Howard & Chittenden, U. S. C. 96, 5, '07.
 Howard & Chittenden, U. S. C. 110, 5, '09.
 Howard & Fiske, U. S. B. 91, 140, 1911.
 Pease, Cal. Hort. Comm. C. Nov. '05, 10.
- Frontina tenthredinidarum**
 Hewitt, Can. Exp. Farms Ent. B. 5, 33,
 1912.
- Frosted scale, see Lecanium pruinosum**
- Fruit bark-beetle, see Scolytus rugulosus**
- Fruit flies**
 Compere, Cal. Hort. B. I, 10, 709, 1912.
 Severin, Can. Ent. 1914, 243, 277, 309.
- Fruit fly, see Drosophila ampelophila**
- Fruit fly, Indian, see Ceratitis capitata**
- Fruit insects**
 Britton, Conn. Farm., Feb. 24, 1906, 8.
 Dean, Mont. Hort. Soc., 1913, 50.
 Dean & Peairs, Kans. Agr. Educ. VI, 2,
 1913.
 Johnson, Pa. Hort. Assoc. Pr. 53rd
 Meet., 1912, 59.
 Norton & Symons, Md. B. 115, 176, '07.
 Sanderson, Vt. Hort. Soc. 6th R. 32, '09.
 Severin, S. D. Hort. Soc. 7th R. 89, 1910.
 Slingerland, Pr. N. Y. Grow. Assoc., 7th
 East Meet., 121, 1909.
 Smith, N. J. R., 1910, 303.
 Symons, Md. B. 101, 126, 1905.
 Taylor, Nebr. Hort. Soc., 1909, 221.
 Taylor, Colo. Bd. Hort. R. f., 1910, 108,
 1911.
 Wood, Mont. Hort. Soc., 1912, 77.
- Fruit insects, see also Orchard insects**
- Fruit-tree bark beetle, see Scolytus rugu-
 losus**
- Fruit-tree leaf-roller, see Archips argyro-
 pila**
- Fruit-tree leaf syneta, see Syneta albida**
- Fruit-tree pulvinaria, see Pulvinaria
 amygdali**
- Frutolin**
 Forbes, Ill. B. 107, 257, 1906.
- Fuller's rose beetle, see Aramigus fulleri**
- Fumigants**
 O'Kane, Inj. Ins. 80, 1915.
- Fumigating cyanide**
 ——— Rur. Calif., May 1912, 160.
- Fumigation**
 Adamson, Pac. Rur. Press, LXXXIV,
 '301, 1912.
 Bowman, Rur. Calif., Jan. 1910, 17.
 Bremner, Cal. Hort. Comm. Destr. Ins.,
 1910, 27.
 Burgess, Ohio Bd. Agr. R. 60, 602, 1905.
 Burgess, Ohio Bd. Agr. R. 61, 651,
 1906.

- Burgess, Ohio Nurs. Orch. Insp. R. 4, 6, 1906.
- Chittenden, Amer. Mill., Sept. 1, 1909, 738.
- Clarke, Rur. Calif., Feb. 1906, 61.
- Cook, Cal. Hort. Comm., 37th Fr. Grow. Conv. 102, 1910.
- Cundiff, Pac. Rur. Press, LXXXVIII, 593, 1914.
- Dean, Kans. B. 189, 177, 1913.
- Dietz, Ind. Ent. R. 6, 96, 1914.
- Essig, Ventura Co. (Cal.) Hort. Comm. B. 2, 1911.
- Evans, Ohio Bd. Agr. R. 62, 592, 1907.
- Gee, S. C. B. 170, 15, 1912.
- Hinds, J. Ec. Ent. III, 394, 1910.
- Howard & Popenoe, U. S. C. 163, 5, '12.
- Mills, Pease, Bemis & Cook, Pac. Rur. Press, LXXIV, 20, 1907.
- Moore, Minn. C. 28, 3, 1914.
- Morrill, Cal. Cult., XXXIV, 604, 1910.
- Morrill, Cal. Cult., XXXV, 436, 1910.
- Morrill, Fla. Fr. Prod. News, Feb. 18, 1910, 3.
- Pease, Cal. Cult., XXX, 160, 1908.
- Pease, Claremont (Cal.) Pom. Club B. 1, 15, 1909.
- Pease, Cal. Cult., XXXVIII, 419, 1912.
- Pease, Cal. Hort. B. I, 5, 188, 1912.
- Phillips, J. Ec. Ent. II, 280, 1909.
- Pierce, Cal. Cult., XXXIV, 675, 1910.
- Pierce, Pom. Jr. Ent. II, 139, 175, 240, 1910.
- Quayle, Cal. B. 214, 506, 1911.
- Sellers, Cal. Cult., XXXV, 100, 1910.
- Shaw, Ohio Bd. Agr. R. 64, 1909, 627.
- Shaw, Ohio Bd. Agr. R. 65, 1910, 540.
- Slingerland & Crosby, N. Y. C. B. 252, 348, 1908.
- Smith, N. J. Ent. C. 23.
- Smith, N. C. B. 203, 25, 1909.
- Surface, Pa. Hort. Assoc. R. f. 1905, 41.
- Surface, Pa. D. A. Zoöl. VI, 1, 26, 1908.
- Surface, Pa. D. A. Zoöl. VII, 4, 1909.
- Symons, Md. Hort. Soc., 1905, 61, 1906.
- Symons, Md. Hort. Soc., 1908, 173, '09.
- Woglum, Cal. Cult., XXXI, 171, 1908.
- Woglum, Cal. Cult., XXXIII, 147, 1909.
- Woglum, U. S. B. 79, 1909.
- Woglum, Cal. Cult., XXXIV, 232, 1910.
- Woglum, Cal. Fr. Grow., Feb. 26, 1910, 11.
- Woglum, Rur. Calif., Mar. 1910, 82.
- Woodworth, Cal. C. 50, 1910.
- Rur. Calif., June 1905, 221.
- Rur. Calif., Oct. 1906, 450.
- Rur. Calif., May 1909, 152.
- Fumigation apparatus**
- Hodgetts, Rept. Insp. Fum. App., 1904 (Ontario, Can.) 1905.
- Hodgetts, Rept. Insp. Fum. App. f. 1905 (Ontario, Can.) 1906.
- Morrill, Pac. Rur. Press, LXXIX, 224, 1910.
- Woglum, U. S. B. 90, 1, 1912.
- Fumigation for Aspidiotus perniciosus**
- Britton, Conn. Ent. R. 7, 270, 1907.
- Britton, Conn. Ent. R. 8, 797, 1907.
- Marlatt, U. S. B. 62, 79, 1906.
- Fumigation for bedbugs**
- Herrick, Can. Ent., 1907, 341.
- Fumigation, influence of moisture**
- Schoene, N. Y. St. Tech. B. 30, 1913.
- Fumigation, influence of temperature**
- Schoene, N. Y. St. Tech. B. 30, 1913.
- Fumigation of greenhouse**
- Gahan, Md. B. 119, 26, 1907.
- Houghton, Del. R. 16-17-18, 85, 1907.
- Slingerland & Crosby, N. Y. C. B. 252, 348, 1908.
- Slingerland, Herrick & Crosby, N. Y. C. B. 283, 479, 1910.
- Fumigation of houses**
- Herrick, Household Ins. 441, 1914.
- Surface, Pa. D. A. Zoöl. III, 4, 110, '05.
- Surface, Pa. D. A. Zoöl. V, 4, 117, 1907.
- Surface, Pa. D. A. Zoöl. VII, 5, 132, '09.
- Surface, Pa. D. A. Zoöl. III, 2, 34, 1913.
- Fumigation of nursery stock**
- Becker, Ark. C. 19, 1913.
- Britton, Conn. R. 6, 227, 1907.
- Britton, Conn. R. 7, 270, 1908.
- Burgess, Ohio Nurs. Orch. Insp. B. 6, 5, 1905.
- Burgess, Ohio Nurs. Orch. Insp. R. 5, 11, 1907.
- Glenn, J. Ec. Ent. V, 216, 1912.
- Morgan, Tenn. Bd. Ent. B. 2, 11, 1905.
- Newell, Ga. Bd. Ent. B. 15, 3, 1905.
- Newell, La. Crop Pest Comm. C. 29, 1909.
- Shaw, Rur. Calif., May 1906, 219.
- Surface, Pa. D. A. Zoöl. B. II, 10 & 11, 346, 1905.

- Symons, J. Ec. Ent. V, 220, 1912.
 Symons & Gahan, Md. B. 105, 11, 1905.
 ——— Rur. N. Y., 1907, 277.
 ——— Tenn. Dept. Agr. Bien. R., 1905-1906, 230.
 ——— Tenn. Bd. Ent. R. f., 1907, 50.
- Fumigation of white fly**
 Merrill, Cal. Hort. B. I, 6, 242, 1912.
- Fumigator**
 Chittenden, Amer. Miller, Sept. 1, 1912, 701.
 Woglum, Cal. Cult. XLI, 126, 1913.
- Fungine**
 ——— U. S. D. A. Ins. & Fung. Bd. Ins. 6, p. 87, 1914.
- Fungous diseases**
 Billings & Glenn, U. S. B. 107, 1911.
 Glaser, J. Ec. Ent. VII, 473, 1914.
 Morrill & Back, U. S. B. 102, 20, 1912.
 Rane, Mass. For. R. 7, 98, 1911.
 Rane, Mass. For. R. 8, 91, 1912.
 Watson, J. Ec. Ent. V, 200, 1912.
- Galerita janus**
 Hammar, U. S. B. 80, 110, 1910.
- Galeruca pomonae**
 Davis, Ent. News, 1907, 269.
- Galerucella cavicollis**
 Felt, N. Y. St. Mus. Mem. 8, 550, 1906.
 Gossard, Ohio B. 233, 129, 1911.
 O'Kane, Inj. Ins. 263, 1914.
- Galerucella decora**
 Criddle, J. Ec. Ent. IV, 240, 1911.
 Criddle, J. Ec. Ent. V, 251, 1912.
 Criddle, Ont. Ent. Soc. R. 43, 100, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 566, 1906.
 Hewitt, Nor'-West Farm., July 5, 1911, 873.
 Hewitt, Nor'-West Farm., May 6, 1912, 658.
- Galerucella externa**
 Criddle, J. Ec. Ent. IV, 240, 1911.
 Criddle, J. Ec. Ent. V, 251, 1912.
 Criddle, Nor'-West Farm., Dec. 20, 1912, 1593.
- Galerucella luteola**
 Bailey, Vt. Agr. R. 5, 22, 1913.
 Bailey, Vt. Agr. R. 6, 34, 1914.
 Britton, Conn. B. 155, 3, 1907.
 Britton, Conn. R. 7, 337, 1908.
 Britton, Conn. R. 8, 815, 1909.
 Britton, Conn. R. 13, 256, 1914.
- Brues, Wis. Hort. Soc. R. f., 1906, 18.
 Burgess, Ohio Nurs. Orch. Insp. B. 4, 7, 1905.
 Burgess, U. S. B. 52, 55, 1905.
 Burgess, Ohio Nurs. Orch. Insp. R. 4, 13, 1906.
 Burgess, Ohio Hort. Soc., 1906, 54.
 Burgess, U. S. B. 60, 73, 1906.
 Douglass, Ind. Ent. R. 1, 151, 1908.
 Douglass, Ind. Ent. R. 2, 81, 1910.
 Douglass, Ind. Ent. R. 4, 131, 1912.
 Ehrhorn, Pac. Rur. Press, LXXVI, 404, 1908.
 Felt, N. Y. R. 20, 405, 1905.
 Felt, N. Y. St. Mus. Mem. 8, 146, 1905.
 Felt, U. S. B. 52, 51, 1905.
 Felt, N. Y. R. 21, 96, 1906.
 Felt, U. S. B. 60, 90, 1906.
 Felt, N. Y. St. Mus. B. 109, 9, 1907.
 Felt, N. Y. R. 22, 56, 1907.
 Felt, U. S. B. 67, 41, 1907.
 Felt, C. Gentl., 1908, 107.
 Felt, J. Ec. Ent. I, 150, 1908.
 Felt, N. Y. R. 23, 39, 1908.
 Felt, J. Ec. Ent. I, 280, 1908.
 Felt, N. Y. R. 24, 50, 1909.
 Felt, C. Gentl., 1910, 740.
 Felt, J. Ec. Ent. III, 381, 1910.
 Felt, N. Y. R. 25, 97, 1910.
 Felt, N. Y. R. 26, 53, 1911.
 Felt, N. Y. St. Mus. B. 156, 6, 1912.
 Felt, N. Y. R. 27, 105, 1912.
 Felt, N. Y. R. 28, 47, 1913.
 Fernald, Mass. B. 125, 50, 1908.
 Fernald, Mass. R. 21, I, 75, 1909.
 Fernald, Mass. R. 22, 70, 1910.
 Fernald, Fernald & Summers, Mass. R. 20, 154, 1908.
 Forbush, Mass. Bd. Agr. R. 56, 342, '09.
 Fullerton, Amer. Cult., Aug. 15, '08, 3.
 Garman, Ky. B. 120, 45, 1905.
 Gossard, J. Ec. Ent. I, 189, 1908.
 Herrick, N. Y. C. C. 8, 1910.
 Herrick, J. Ec. Ent. V, 169, 1912.
 Herrick, N. Y. C. B. 333, 491, 1913.
 Herrick, Rur. N. Y., 1913, 502.
 Houser, Ohio B. 194, 194, 1908.
 Jarvis, Conn. Storrs, B. 56, 253, 1909.
 Johannsen, Mè. B. 207, 463, 1912.
 Johannsen & Patch, Me. B. 195, 234, 1911.
 Lamson, Conn. Farm., Aug. 1, '08, 16.

- Loveland, R. I. R., 1911, Ent. Dept. 14, 1911.
- Osborn, U. S. B. 52, 50, 1905.
- Price, Va. C. 7, 76, 1909.
- Quayle, J. Ec. Ent. IV, 545, 1911.
- Rane, Mass. For. R. 6, 99, 1910.
- Sanderson, J. Ec. Ent. III, 211, 1910.
- Shaw, Ohio Bd. Agr. R. 63, 1908, 695.
- Shaw, Ohio Nurs. Orch. Insp. R. 7, 17, 1909.
- Sherman, J. Ec. Ent. II, 204, 1909.
- Slingerland, Rur. N. Y., 1908, 452.
- Smith, N. J. B. 181, 40, 1905.
- Smith, N. J. R., 1905, 537.
- Smith, N. J. R., 1906, 564.
- Smith, N. J. R., 1907, 417.
- Smith, U. S. B. 67, 36, 1907.
- Smith, N. J. R., 1908, 309.
- Smith, N. J. R., 1909, 408.
- Smith, N. J. R., 1910, 339.
- Smith, N. J. Bd. Agr. R. 37, 189, 1910.
- Smith, N. J. R., 1911, 430.
- Stene, R. I. Bd. Agr. R. 21, 50, 1906.
- Stene, R. I. Nurs. Insp. 34, 1906.
- Stene, R. I. Bd. Agr. R. 24, 125, 1909.
- Stene, R. I. Bd. Agr. R. f. 1909, 74.
- Stene, Comm. Suppr. G & B-T Moths R. f. 1911, 37.
- Surface, Pa. D. A. Zoöl. B. II, 10 & 11, 331, 1905.
- Surface, Pa. D. A. Zoöl. V, 12, 381, '08.
- Surface, Pa. D. A. Zoöl. I, 1, 32, 1911.
- Surface, Pa. D. A. Zoöl. I, 4, 173, 1911.
- Washburn, Minn. Ent. R. 12, 118, '08.
- Weiss, N. J. R., 1912, 423.
- C. Gentl., 1905, 592, 666.
- C. Gentl., Mar. 30, 1911, 313.
- R. I. Bd. Agr. R. 28, 15, 1913.
- U. S. Y. B., 1905, 635.
- U. S. Y. B., 1907, 550.
- U. S. Y. B., 1908, 577.
- Galerucella nymphaeae**
Chittenden, U. S. B. 54, 58, 1905.
- Gall-like kermes, see Kermes galliformis**
- Gall midge hosts**
Felt, J. Ec. Ent. IV, 451, 1911.
- Galleria mellonella**
Cooley, Mont. B. 92, 58, 1912.
Cooley, Mont. B. 98, 125, 1914.
Johannsen & Patch, Me. B. 195, 240, 1911.
Surface, Pa. D. A. Zoöl. III, 1, 5, 1913.
- Garden carrion beetle, see Silpha ramosa**
- Garden flea-hopper, see Halticus uhleri**
- Garden insects**
Britton, Conn. Farm., June 11, '10, 2.
Broderick, Can. Hort. XXXVII, 246, 1914.
Caesar, Can. Hort. XXXIII, 262, 282, 1910.
Caesar, Can. Hort. XXXIV, 10, 37, '11.
Chittenden, Ins. Inj. Veg., 1907.
Crandall, Ill. Hort. Soc. f. 1909, 282.
Davis, Ill. Hort. Soc. f. 1909, 331.
Dow, Farm. Advocate, Can., 1911, 867.
Frith, Farm. Advocate, Can., 1911, 897.
Hadley, N. H. Hort. Soc., 1911, 25.
Neville, Farm. Advocate, Can., '11, 895.
Popenoe, Kans. Hort. Soc., 1905, 214.
Postiff, Mich. Farm., June 1, 1912, 630, 637, 682.
Rose, Can. Hort. XXXVII, 197, 1914.
Sanderson, N. Eng. Farm., Feb. 6, 1909, 9.
Sanderson, Mass. Hort. Soc., '09, I, 29.
Surface, Pa. D. A. Zoöl. II, 4, 173, '12.
Twigg, Kans. Hort. Soc., 1911, 321.
——— Farm. Advocate, Can., 1911, 866, 1021.
- Garden webworm, see Loxostege similalis**
- Gas tar**
Smith, N. J. B. 213, 37, 1908.
Smith, N. J. R., 1909, 389.
- Gasoline torch**
Forbes, J. Ec. Ent. VI, 415, 1913.
- Gastrophilus equi**
Bishopp, U. S. Y. B., 1912, 387.
Dalrymple, Amer. Vet. Rev. XLII, 544, 1913.
Felt, N. Y. Farm. 7, Dec. 1905, 4.
Herms, Cal. Cult., XLI, 291, 1913.
Kaupp, Anim. Parasites, 26, 1908.
Lochhead, Syn. Ec. Ent. 89, 1914.
Merritt, Iowa Agric., May 1905, 364.
O'Kane, Inj. Ins. 371, 1914.
Surface, Pa. D. A. Zoöl. III, 1, 15, '13.
Tucker, Kans. Farm., May 17, '06, 533.
Washburn, Minn. P. B. 22, 2, 1905.
Washburn, Minn. R. 10, 125, 1905.
——— U. S. Y. B., 1906, 516.
- Gastrophilus haemorrhoidalis**
Buffington, Amer. Vet. Rev., XXIX, 37, 1905.
Cooley, Mont. B. 98, 126, 1914.

- Kaupp, Anim. Parasites, 27, 1908.
 Washburn, Minn. P. B. 22, 4, 1905.
- Gastrophilus nasalis**
 Washburn, Minn. P. B. 22, 4, 1905.
- Gastrophilus spp.**
 Swenk, Nebr. Bd. Agr. R. f. 1908, 335.
 ——— U. S. Y. B., 1908, 580.
- Gastrophysa dissimilis**
 ——— Pac. Rur. Press, LXIX, 322, '05.
- Gaurotes cyanipennis**
 Felt, N. Y. St. Mus. Mem. 8, 454, 1906.
- Gelechia cereallella**
 Douglass, Ind. Ent. R. 2, 69, 1910.
 Essig, Cal. Cult. XXXV, 454, 1910.
 Troop, Farm. Guide, Jan. 27, 1906, 6.
- Gelechia confusella**
 Gossard, Ohio B. 233, 125, 1911.
 Slingerland & Crosby, Man. Fr. Ins. 287, 1914.
- Gelechia gossypiella**
 Marlatt, U. S. Fed. Hort. Bd. R. f. 1913, 9.
 Marlatt, U. S. Fed. Hort. Bd. R. f. 1914, 8.
 Morrill, S. W. Stockm., May 23, '13, 10.
 ——— U. S. Fed. Hort. Bd. Quar. Not. 8, 1913.
 ——— U. S. Fed. Hort. Bd. Quar. Not. 9, 1913.
- Gelechia gossypiella, quarantine**
 Houston, Fla. Grow., July 26, 1913, 9.
 Morrill, S. W. Stockm., June 27, 1913, 10.
 ——— U. S. Fed. Hort. Bd. (S. R. A.) 4, 1914.
- Geocoris bullata**
 Pettit, Mich. B. 233, 158, 1906.
 Swenk, Nebr. Bd. Agr. R. f. 1910, 362.
- Geocoris fuliginosus**
 Gossard, O. Farm., June 24, 1911, 723.
- Geoica sp.**
 Smith, Nebr. Bd. Agr. R. f. 1908, 316.
- Geoica squamosa**
 Swenk, Nebr. Bd. Agr. R. f. 1910, 364.
 Swenk, J. Ec. Ent. IV, 284, 1911.
 Swenk, Nebr. Ent. B. 1, 83, 1913.
- Geophilus rubens**
 Hammar, U. S. B. 80, 110, 1910.
- German grain-aphis, see Macrosiphum cerealis**
- German roach, see Blatella germanica**
- Gerstaeckeria clathrata**
 Hunter, Pratt & Mitchell, U. S. B. 113, 30, 1912.
- Gerstaeckeria hubbardi**
 Hunter, Pratt & Mitchell, U. S. B. 113, 30, 1912.
- Gerstaeckeria nobilis**
 Hunter, Pratt & Mitchell, U. S. B. 113, 30, 1912.
 Pierce, U. S. B. 100, 78, 1912.
- Gerstaeckeria porosa**
 Hunter, Pratt & Mitchell, U. S. B. 113, 29, 1912.
- Gipsy moth, see Porthetria dispar**
- Glaea sericea**
 Franklin, Ent. News, 1907, 19.
- Glassy cutworm, see Hadenia devastatrix**
- Glassy-winged sharpshooter, see Homalodisca triquetra**
- Gloomy scale, see Chrysomphalus tenebricosus**
- Glossina palpalis**
 Webster, U. S. Y. B., 1907, 238.
- Glover's grain moth, see Batrachedra rileyi**
- Glover's scale, see Lepidosaphes gloveri**
- Glyciphagus robustus**
 Herrick, Household Ins. 286, 1914.
- Glycobius speciosus, see Plagionotus**
- Glypta animosa**
 Johnson & Hammar, U. S. B. 116, 46, 1912.
- Glypta symplepices**
 Herrick, N. Y. C. B. 311, 286, 1912.
- Glypta vulgaris**
 Johnson & Hammar, U. S. B. 116, 46, 1912.
- Glyptapanteles, see Apanteles**
- Glyptina brunnea**
 Forbes, Ill. Ent. R. 23, 191, 1905.
- Glyptoscelis pubescens**
 Felt, N. Y. St. Mus. Mem. 8, 695, 1906.
- Gnathocerus cornutus**
 ——— U. S. Y. B., 1908, 579.
- Gnathotrichus materiarius**
 Felt, N. Y. St. Mus. Mem. 8, 370, 1906.
- Gnathotrichus occidentalis**
 Buttrick, J. Ec. Ent. V, 457, 1912.
- Gnathotrichus retusus**
 Swaine, Can. Exp. Farms Ent. B. 7, 37, 1914.

- Gnathotrichus sulcatus**
 Buttrick, J. Ec. Ent. V, 457, 1912.
 Swaine, Can. Exp. Farms Ent. B. 7, 37, 1914.
- Goes pulchra**
 Felt, N. Y. St. Mus. Mem. 8, 431, 1906.
- Goes tigrina**
 Felt, N. Y. St. Mus. Mem. 8, 268, 1905.
- Golden tortoise beetle**, *see* **Coptocycla bicolor**
- Goldsmith beetle**, *see* **Cotalpa lanigera**
- Gonia capitata**
 Sanderson, U. S. B. 57, 8, 1906.
- Goniocotes burnettii**
 Washburn, Minn. P. B. 22, 26, 1905.
- Goniocotes hologaster**
 Kaupp, Colo. B. 185, 6, 1912.
 Washburn, Minn. P. B. 22, 26, 1905.
- Goniodes dissimilis**
 Pearl, Surface & Curtis, Me. R. 26, App. Poultry, 126, 1911.
- Goniodes stylifer**
 Ewing, Oreg. Coll. B. 92, 12, 1913.
 Kaupp, Colo. B. 185, 6, 1912.
- Goniozus sp. on codling moth**
 Quaintance, U. S. Y. B., 1907, 443.
- Good's Caustic Potash Tobacco Fish Oil Soap No. 6**
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 3, p. 45, 1914.
- Gooseberry aphid**, *see* **Aphis grossulariae**
- Gooseberry fruit fly**, *see* **Epocha canadensis**
- Gooseberry fruit-worm**, *see* **Zophodia grossulariae**
- Gooseberry insects**
 Surface, Pa. D. A. Zool. I, 1, 33, 1911.
- Gooseberry midge**, *see* **Dasyneura grossulariae**
- Gooseberry spanworm**, *see* **Cymatophora ribearea**
- Gortyna**, *see* **Papaipema**
- Gossyparia spuria**
 Bethune, Ont. Agr. Coll. R. 35, 28, 1910.
 Bethune, Ont. Ent. Soc. R. 40, 64, 1910.
 Britton, Conn. B. 151, 5, 1905.
 Britton, Conn. R. 5, 235, 1906.
 Britton, Conn. R. 11, 344, 1912.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 170, 1907.
 Doten, Nev. B. 63, 31, 1907.
 Doten, Nev. B. 65, 5, 1908.
 Doten, Nev. B. 66, 27, 1908.
- Doten, Nev. B. 72, 34, 1909.
 Doten, Nev. B. 73½, 42, 1910.
 Doten, Nev. C. 6, 1910.
 Doten, Cal. Hort. I, 3, 89, 1912.
 Doten, Nev. R. f. 1912, 39.
 Essig, Cal. Hort. B. II, 1-2, 93, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 203, 1905.
 Felt, N. Y. R. 22, 58, 1907.
 Felt, U. S. B. 67, 41, 1907.
 Gibson, Ont. Ent. Soc. R. 42, 14, 1912.
 Gibson, Ont. Ent. Soc. R. 43, 18, 1913.
 Hitchings, Me. Ent. R. 3, 3, 1908.
 Houser, Ohio B. 194, 179, 1908.
 Johannsen, Me. B. 187, 10, 1911.
 Johannsen, Me. B. 207, 441, 1912.
 Melander, Wash. B. 74, 3, 1906.
 Stene, R. I. Nurs. Insp. 29, 1906.
 Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
 Titus, Deseret Farm, Dec. 5, 1908, 12.
 Weiss & Patterson, N. J. C. 15, 17, 1912.
 Woodworth, Cal. Hort. B. I, 3, 101, 1912.
- Gracilaria sp.**
 Felt, N. Y. R. 27, 117, 1912.
- Grain leaf-hopper**, *see* **Diedrocephalus flaviceps**
- Grain mite**, *see* **Pediculoides**
- Granary insects**
 Dean, Tex. Stockm. Farm., Nov. 4, 1908, 6.
 Gibson, Agr. Gaz. Can., Dec. 1914, 961.
 Popenoe, Kans. Farm., Oct. 4, 1906, 1027.
 Stedman, Col. Rur. World, Nov. 11, 1908, 260.
 Titus, Utah Farm., Nov. 8, 1913, 248.
- Granary weevil**, *see* **Calandra granaria**
- Granulated cutworm**, *see* **Feltia annexa**
- Grape berry moth**, *see* **Polychrosis viteana**
- Grape-blossom midge**, *see* **Contarinia johnsoni**
- Grape cane-borer**, *see* **Amphicerus bicaudatus**
- Grape-cane gall-maker**, *see* **Ampelogypter sesostris**
- Grape-cane girdler**, *see* **Ampelogypter ater**
- Grape colaspis**, *see* **Colaspis brunnea**
- Grape curculio**, *see* **Craponius inaequalis**
- Grape insects**
 Brown, Nat'l Fr. Grow., Feb. 1908, 6.
 Burgess, Ohio Bd. Agr. R. 60, 607, 1905.
 Clay, Tex. Agr. & Statis. R. 1905, 269.
 Douglass, Ind. Ent. R. 3, 194, 1910.

Grape insects (*Cont'd*)

- Hartzell, Pr. N. Y. Fr. Grow. Assoc.,
10 Meet., 148, 1911.
- Hartzell, N. Y. St. B. 331, 1910.
- Melander, Better Fr., Dec. 1912, 15.
- Parrott, Pr. West. N. Y. Hort. Soc., 57
Meet., 121, 1912.
- Surface, Pa. D. A. Zoöl. I, 1, 35, 1911.
- Symons, Md. B. 101, 151, 1905.
- Young, Green's Fr. Grow., May '11, 6.
- Grape leaf-folder**, *see* *Desmia funeralis*
- Grape leaf-hopper**, *see* *Typhlocyba comes*
- Grape-leaf skeletonizer**, *see* *Harrisina americana*
- Grape phylloxera**, *see* *Phylloxera vastatrix*
- Grape root-borer**, *see* *Memythrus polistiformis*
- Grape root-worm**, *see* *Fidia viticida*
- Grape sawfly**, *see* *Selandria vitis*
- Grape scale**, *see* *Aspidiotus uvae*
- Grape seed-weevil**, *see* *Craponius inaequalis*
- Grape-seed worm**, *see* *Evoxysoma vitis*
- Grapevine aphis**, *see* *Macrosiphum viticola*
- Grapevine flea-beetle**, *see* *Haltica chalybea*
- Grapevine girdler**, *see* *Ampelogypter ater*
- Grapevine hoplia**, *see* *Hoplia callipyge*
- Grapevine leaf roller**
Headlee, Kans. Farm., Mar. 5, '08, 301.
- Grapholitha**, *see* *Enarmonia*
- Graphops nebulosus**
Gossard, Ohio B. 233, 150, 1911.
Webster, J. Ec. Ent. II, 211, 1909.
- Graphops pubescens**
Baldwin, Ind. Ent. R. 5, 124, 1912.
Slingerland & Crosby, Man. Fr. Ins. 393,
1914.
- Graptodera chalybea**, *see* *Haltica*
- Grasselli arsenate of lead paste**
—— U. S. D. A. Ins. & Fung. No. 62,
1913.
- Grasselli lime-sulphur solution**
—— U. S. D. A. Ins. & Fung. Bd. Ins.
6, p. 88, 1914.
- Grasshoppers**
Ball, Utah Farm., June 14, 1913, 751.
Ball & Titus, Deseret Farm., May 6,
1911, 2.
- Barre & Conradi, S. C. B. 141, 25, 1909.
- Bentley, Tenn. Bd. Ent. R. f. 1913, 20.
- Bethune, Ont. Ent. Soc. R. 40. 66, '10.
- Camp, Field & Farm, May 6, 1911, 5.
- Criddle, Nor'-West Farm., Dec. 20,
1907, 1157.
- Criddle, Ont. Ent. Soc. R. 43, 98, 1913.
- Dean, Farm & Ranch, Jan. 4, 1913, 14.
- Ehrhorn, Cal. Hort. Comm. Bien. R. 2,
229, 1907.
- Geismar, Mich. Sp. B. 53, 446, 1910.
- Gillette, Colo. P. B. 38, 1907.
- Gillette, Colo. B. 123, 17, 1908.
- Gillette, Colo. Fr. Grow., Oct. 1908, 19.
- Gillette, Farm. Guide, Oct. 24, '08, 20.
- Gossard, Farm. Guide, Sept. 30, '05, 13.
- Gossard, Ohio P. B. 268, 1905.
- Gossard, Prai. Farm., Sept. 21, '05, 2.
- Gossard, Ohio B. 233, 58, 1911.
- Gossard, Ohio P. B. 324, 1911.
- Gossard, Farm. Guide, July 29, '11, 6.
- Gossard, Ohio P. B. 349, 1912.
- Houser, Ohio C. 137, 127, 1913.
- Isaac, Cal. Cult., XXV, 6, 1905.
- Johnson, Cal. Cult., XXXV, 617, '10.
- Johnson, S. W. Stockm., Dec. 9, '10, 9.
- Mann, Prai. Farm., Sept. 1, 1911, 3.
- Mathews, Mich. Farm., Aug. 22, 1914,
v. 143, p. 138.
- Melander, S. D. Hort. Soc. 11th R. 123,
1914.
- Merrill, S. W. Stockm., July 4, 1913, 10.
- Merrill, Cal. Cult., XL, 744, 1913.
- Milliken, Kans. Farm., Oct. 21, '11, 6.
- Mills, Cal. Cult., XLI, 123, 1913.
- Mills, Cal. Cult., XLII, 606, 1914.
- Morrill, S. W. Stockm., May 15, '14, 10.
- Morrill, Utah Farm., June 13, 1914,
1052.
- Morrill, S. W. Stockm., June 26, '14, 10.
- Newell & Rosenfeld, La. Crop Pest
Comm. C. 118, 119, 1909.
- Scholl, Farm & Ranch, May 24, '13, 12.
- Swenk, Nebr. Ent. B. 1, 3, 1913.
- Swenk, Nebr. Farm. Aug. 5, 1914, 760.
- Thomas, Field & Farm., July 29, '05, 5.
- Washburn, Minn. P. B. 32, 3, 1908.
- Washburn, Minn. R. 13, 10, 1910.
- Washburn, Minn. B. 123, 73, 1911.
- Washburn, Minn. R. 14, 1, 1912.
- Washburn, Minn. R. 21, 42, 1914.
- Webster, Farm & Ranch, July 13, 1912,
13.
- Westhuk, Farm & Ranch, June 14,
1913, 12.
- Wilson. Cal. Cult., XLII, 521, 1914.

- Wilson, Oreg. Bien. Crop Pest R. f.
1913-1914, 133.
- Wytheok, Tex. Stockm. Farm., June 11,
1913, 11.
- Agr. Gaz. Can., Aug. 1914, 627.
- Cal. Cult. XXVI, 534, 1906.
- Cal. Fr. Grow., Aug. 26, 1905, 5.
- Cal. Fr. Grow., June 7, 1913, 1.
- Colo. Fr. Grow., Apr. 1907, 4.
- Deseret Farm., Dec. 14, 1907, 6.
- Iowa Home., Sept. 18, 1913, 1459
- Pac. Rur. Press, LXXXV, 637
1913
- Grasshoppers and chickens**
Alter, Deseret Farm., Jan. 25, 1908, 13.
Dean, Kans. Farm., July 5, 1913, 7.
Vaplon, Nat'l Stockm & Farm., Aug. 4,
1910, 20.
- Wright, Kans. Farm., July 29, 1911, 4,
- Grasshoppers and ducks**
Loomis, S. D. Hort. Soc. 9th R. 354, '12.
- Grasshoppers and turkeys**
Crowel, Farm. Guide, Mar. 3, 1906, 19.
- Grasshoppers in alfalfa**
Dean, Kans. Agr. Educ. I, 4, 72, 1909.
Popenoe, Kans. Farm., June 21, 1906,
654.
——— Mich. B. 271, 294, 1913.
- Grasshoppers in Colorado**
Gillette, J. Ec. Ent. V, 121, 1912.
- Grasshoppers in corn**
Dean, Kans. Agr. Educ. I, 4, 28, 1909.
Forbes, Ill. Ent. R. 23, 64, 1905.
- ✓ Garman, Ky. B. 145, 295, 1909.
- Stedman, Mo. Bd. Agr. R. 38, 327, 1906.
- Grasshoppers in cotton**
Sherman, N. C. Dept. Agr. B. June,
1908, 50.
- Grasshoppers in gardens**
Conradi, Tex. B. 89, 14, 1907.
Lovett, Oreg. Coll. B. 91, 4, 1913.
- Grasshoppers in grain**
Haseman, Mo. Bd. Agr. R. 44, 280, 1912.
- Grasshoppers in Kansas**
Dean, J. Ec. Ent. VII, 67, 1914.
Hunter, J. Ec. Ent. VII, 73, 1914.
- Grasshoppers in Minnesota**
Washburn, J. Ec. Ent. V, 111, 1912.
- Grasshoppers in Nebraska**
Swenk, Nebr. Farm. Apr. 5, 1911, p. 403.
- Grasshoppers, legislation**
Washburn, Minn. R. 12, 38, 1908.
- Grasshoppers, parasites of**
Washburn, Minn. R. 14, 37, 1912.
- Grasshoppers, poisons**
Johnson, Colo. Fr. Grow., Aug. 1910, 32.
Popenoe, Kans. B. 136, 162, 1906.
- Grasshoppers in sugar beets**
Harrison, Kans. Bd. Agr. Quart. R. vol.
XXV, 99, 21, 1906.
- Grasshoppers in tobacco**
Johnson, Wis. B. 237, 33, 1914.
Morgan, U. S. Y. B. 1910, 239.
- Grass sawfly, see** *Pachynematus extensicornis*
- Grass thrips, see** *Anaphothrips striata*
- Gray blister beetle, see** *Epicauta cinerea*
- Gray citrus scale, see** *Coccus citricola*
- Gray hair-streak, see** *Uranotes melinus*
- Gray leaf-beetle, see** *Glyptoscelsis longior*
- Greasewood eriococcus, see** *Eriococcus adenostomae*
- Greasy cutworm, see** *Agrotis ypsilon*
- Great Basin tent caterpillar, see** *Malacosoma fragilis*
- Great Plains cricket, see** *Anabrus simplex*
- Great Western Bug Exterminator**
——— U. S. D. A. Ins. & Fung. No. 87,
1913.
- Greater wheat-straw worm, see** *Isosoma grande*
- Greedy scale, see** *Aspidiotus rapax*
- Green apple aphid, see** *Aphis pomi*
- Green bottle fly, see** *Lucilia caesar*
- Green bug, see** *Toxoptera graminum*
- Green clover worm, see** *Plathypena scabra*
- Green fruit-worm, see** *Xylina*
- Greenhead, see** *Tabanus costalis*
- Greenhouse insects**
Cobb, Farm & Ranch, Jan. 10, '14, 13.
Collins, Can. Hort. XXX, 61, 1907.
Condit, Pr. Columbus Hort. Soc. '05, 39.
Davis, Ill. Hort. Soc. f., 1910, 32, 1911.
Fernald, Mass. Crop R. f., Oct. '07, 29.
Fernald, Mass. Bd. Agr. R. 55, 384, '08.
Frey, Nebr. Hort. Soc., 1912, 87.
Gahan, Md. B. 119, 1907.
Lewis, Pr. Ga. Hort. Soc., 1910, 90.
Surface, Pa. D. A. Zool. I, 1, 37, 1911.
——— Rur. N. Y., 1912, 1161.
- Greenhouse leaf-tier, see** *Phlyctaenia ferrugalis*
- Greenhouse orthezia, see** *Orthezia insignis*

- Greenhouse thrips, *see* *Heliothrips haemorrhoidalis*
- Greenhouse white-fly, *see* *Aleurodes vaporariorum*
- Green June beetle, *see* *Allorhina nitida*
- Green oak caterpillar, *see* *Nadata gibbosa*
- Green peach aphid, *see* *Myzus persicae*
- Green plum aphid, *see* *Aphis pruni*
- Green soldier-bug, *see* *Nezara hilaris*
- Green-striped maple worm, *see* *Anisota rubicunda*
- Green tortoise beetle, *see* *Physonota unipunctata*
- Green trogositid, *see* *Trogosita virescens*
- Ground beetles
Smith, N. J. B. 225, 35, 1909.
- Ground squirrel flea, *see* *Ceratopsyllus acutus*
- Gryllotalpa borealis*
Pettit, Mich. B. 233, 193, 1906.
—— C. Gentl., 1907, 928.
- Gryllus domesticus*
Felt, N. Y. St. Mus. B. 129, 30, 1909.
Felt, N. Y. St. Mus. B. 136, 35, 1912.
Herrick, Household Ins. 221, 1914.
Surface, Pa. D. A. Zool. III. 1. 18, '13.
- Gryllus luctuosus*
Felt, N. Y. St. Mus. B. 129, 30, 1909.
Felt, N. Y. St. Mus. B. 136, 35, 1912.
- Gryllus pennsylvanicus*
Forbes, Ill. Ent. R. 23, 214, 1905.
Hunter, Pr. Ent. Soc. Wash. XIV, 63, 1912.
- Gryllus* sp.
Whitmarsh, Ohio B. 253, 141, 1912.
- Grynocharis quadrilineatus*
Felt, N. Y. St. Mus. Mem. 8, 460, 1906.
- Gymnonychus appendiculatus*, *see* *Pristiphora grossulariae*
- Gymnosoma fuliginosa*
Morrill, U. S. B. 64, 11, 1907.
Morrill, U. S. B. 86, 64, 1910.
- Gypona bimaculata*
Osborn, U. S. B. 108, 62, 1912.
- Gypona octolineata*
Felt, N. Y. St. Mus. Mem. 8, 688, 1906.
Osborn, U. S. B. 108, 62, 1912.
Sanderson, U. S. B. 57, 58, 1906.
Webster, J. Ec. Ent. VI, 409, 1913.
- Gypsy moth, *see* *Porthetria dispar*
- Gyrolasia flavimedia*
Essig, Cal. Hort. B. II, 1-2, 274, 1913.
- Habrobracon brevicornis*
Howard, U. S. R. Ent., 1906, 10.
Howard & Fiske, U. S. B. 91, 61 *et seq.*, 1911.
- Habrobracon hebetor*
Chittenden, U. S. B. 104, 30, 1911.
Popenoe, U. S. C. 142, 3, 1911.
Titus, U. S. B. 54, 39, 1905.
- Habrobracon johannseni*
Johannsen, Me. B. 207, 458, 1912.
- Habrocytus piercei*
Hunter & Pierce, U. S. B. 114, 141, '12.
Pierce, U. S. B. 100, 52, 1912.
- Habrocytus* sp.
Hammar, U. S. B. 80, 41, 1909.
- Habrocytus thyridopterigis*
Haseman, Mo. B. 104, 324, 1912.
Howard & Chittenden, U. S. C. 97, 8, 1908.
- Habrolepis dalmanni*
Young, Pr. Columbus Hort. Soc., 1906, 76.
- Hadena arctica*
Forbes, Ill. Ent. R. 23, 21, 1905.
Gibson, Can. Exp. Farms Ent. B. 3, 23, 1912.
—— U. S. Y. B., 1907, 545.
- Hadena devastatrix*
Bethune, Ont. Ent. Soc. R. 39, 131, 1909.
Forbes, Ill. Ent. R. 23, 19, 1905.
Gibson, Can. Exp. Farms Ent. B. 3, 22, 1912.
Stedman, Mo. Bd. Agr. R. 38, 1906.
—— U. S. Y. B., 1905, 634.
—— U. S. Y. B., 1906, 510.
- Hadena lignicolor*
Forbes, Ill. Ent. R. 23, 31, 1905.
- Hadena semicana*
—— U. S. Y. B., 1905, 634.
- Hadena* spp.
Forbes, Ill. Ent. R. 23, 77, 1905.
- Hadrobregmus carinatus*
—— U. S. Y. B., 1906, 516.
- Hadronotus anasae*
Chittenden, U. S. C. 39, 2nd, Ed., 4, '08.
Morrill, U. S. B. 86, 91, 1910.
- Hadronotus carinatifrons*
Girault, Ent. News, 1913, 57.
- Haemaphysalis chordeilis*
Hadwen, Can. Ent. 1910, 221.
Hooker, Bishopp & Wood, U. S. B. 106, 97, 1912.

- Hunter & Bishopp, U. S. Y. B., '10, 229.
- Haemaphysalis leporis-palustris.**
- Hooker, Bishop & Wood, U. S. B. 106, 89, 1912.
- Hunter & Bishopp, U. S. Y. B., '10, 228.
- Hunter & Hooker, U. S. B. 72, 53, 1907.
- Haematobia serrata**
- Bishopp, U. S. Y. B., 1912, 390.
- Dalrymple, Amer. Vet. Rev. XXX, 939, 1906.
- Dalrymple, Amer. Vet. Rev. XLII, 424, 1913.
- Herns, Cal. Cult. XXXIV, 131, 1910.
- Herns, Cal. Cult. XLI, 262, 1913.
- Howard, U. S. F. B. 459, 11, 1911.
- Johannsen, Me. B. 187, 6, 1911.
- Lochhead, Ont. Ent. Soc. R. 36, 129, '06.
- Lochhead, Syn. Ec. Ent. 93, 1914.
- Marlatt, U. S. C. 115, 1, 1910.
- O'Kane, Inj. Ins. 379, 1914.
- Ransom, U. S. B. An. I. R., 1908, 496.
- Smith, N. J. Bd. Agr. R. 37, 184, 1910.
- Spencer, Conn. Farm., July 15, 1905, 14.
- Surface, Pa. D. A. Zoöl. III, 1, 14, 1913.
- Washburn, Minn. P. B. 22, 11, 1905
- Washburn, Minn. R. 10, 148, 1905.
- U. S. Y. B., 1907, 552.
- U. S. Y. B., 1908, 580.
- Haematopinus asini**
- Bishopp, U. S. Y. B., 1912, 395.
- Haematopinus eurysternus**
- Bishopp, U. S. Y. B., 1912, 395.
- Craig, Farm. Guide, Apr. 28, 1906, 6.
- Ransom, U. S. B. An. I. R., 1908, 500.
- Haematopinus spp.**
- O'Kane, Inj. Ins. 374, 1914.
- Haematopinus suis, see H. urius**
- Haematopinus urius**
- Bentley, Tenn. Bd. Ent. R. f. 1913, 24.
- Bishopp, U. S. Y. B., 1912, 395.
- Buckwall, Rur. N. Y., 1910, 404.
- Buckland, Iowa Agric., Feb. 1911, 30.
- Clark, Or. Judd Farm., Sept. 30, 1911, 328.
- Cottrell, Farm & Ranch, July 25, 1908, 7.
- Cottrell, Tex. Stockm. Farm., July 29, 1908, 15.
- Cottrell, Deseret Farm., Jan. 9, 1909, 14.
- Curtis, N. C. B. 207, 174, 1910.
- Heller, Tex. Stockm. Farm., Sept. 18, 1912, 7.
- Herns, Cal. Cult., XLI, 265, 1913.
- Herron, Iowa Agric., June 1907, 352.
- Jamison, Rur. N. Y., 1905, 923.
- Jamison, Rur. N. Y., 1906, 922.
- Jamison, Rur. N. Y., 1909, 616.
- Kaupp, Anin. Parasites, 36, 1908.
- Loomis, Pac. Rur. Press, LXXXVI, 133, 1913.
- Mally, Iowa Home, 1907, 41.
- McNeil, Prai. Farm., LXXX, 46, 1908.
- Robinson, Col. Rur. World, Feb. 14, 1906, 55.
- Shepard, Col. Rur. World, July 4, 1907, 215.
- Snyder, Kans. Farm., Aug. 9, 1906, 822.
- Stevenson, U. S. B. An. Ind. B. 69, '05, 9.
- Surface, Pa. D. A. Zoöl. III, 1, 14, 1913.
- Underwood, Ind. Farm., July 16, '10, 3.
- Deseret Farm., Apr. 15, 1911, 13.
- Farm & Ranch, May 30, 1914, 15.
- Freestone, Iowa Home, 1907, 686.
- Nebr. Farm., Aug. 9, 1906, 657.
- Haematopinus vituli**
- Bishopp, U. S. Y. B., 1912, 395.
- Ransom, U. S. B. An. I. R., 1908, 500.
- Haematosiphon inodora**
- Bishopp, U. S. Y. B., 1912, 394.
- Hag moth, see Phobetrion pithecium**
- Halisidota caryae**
- Britton, Conn. Ent. R. 7, 332, 1907.
- Britton, Conn. R. 7, 332, 1908.
- Britton, Conn. R. 8, 843, 1909.
- Felt, N. Y. St. Mus. Mem. 8, 314, 1905.
- Felt, N. Y. R. 22, 59, 1907.
- Felt, U. S. B. 67, 39, 1907.
- Gibson, Ent. Soc. Ont. R. 38, 82, 1908.
- Gossard, Ohio B. 233, 97, 1911.
- Johannsen & Patch, Me. Comm. Agr. R. f., 1910, 356.
- Lamson, Conn. Storrs B. 71, 76, 1912.
- Lochhead, Syn. Ec. Ent. 67, 1914.
- Patch, Me. B. 108, 164, 1904.
- Sanderson, N. H. R. 17-18, 327, 1906.
- C. Gentl., 1907, 880.
- U. S. Y. B., 1906, 514.
- U. S. Y. B., 1907, 550.
- U. S. Y. B., 1908, 577.
- Halisidota maculata**
- Felt, N. Y. St. Mus. Mem. 8, 523, 1906.
- Gibson, Ent. Soc. Ont. R. 38, 82, 1908.
- Johannsen & Patch, Me. Comm. Agr. R. f., 1910, 356.

Halisidota sp.

Stuart, Vt. R. 18, 310, 1905.

Halisidota tessellaris

Britton, Conn. R. 8, 843, 1909.

Felt, N. Y. St. Mus. Mem. 8, 523, 1906.

Haltica bimarginata

Britton, J. Ec. Ent. IV, 544, 1911.

Felt, N. Y. St. Mus. Mem. 8, 573, 1906.

Gibson, Can. Exp. Farms Ent. C. 2, 6, 1913.

Johannsen, Me. B. 207, 459, 1912.

Haltica carinata

Essig, Cal. Hort. B. II, 1-2, 230, 1913.

Johannsen & Patch, Me. B. 195, 233, '11.

——— U. S. Y. B., 1908, 577.

Haltica chalybea

Alderman, Giddings & Rumsey, W. Va. C. 7, 36, 1913.

Baldwin, Ind. Ent. R. 5, 108, 1912.

Baldwin, Farm. Guide, Feb. 28, 1914, 17.

Barre & Conradi, S. C. B. 141, 35, '09.

Bethune, Ont. Agr. Coll. B. 158, 25, '07.

Britton, Conn. R. 7, 337, 1908.

Caesar, Ont. Ent. Soc. R. 43, 81, 1913.

Dean & Peairs, Kans. Agr. Educ. VI, 2, 97, 1913.

Douglass, Ind. Ent. R. 3, 197, 1910.

Felt, N. Y. R. 22, 52, 1907.

Felt, U. S. B. 67, 40, 1907.

Fulton, Wright & Gregg, Pa. B. 110, 25, 1911.

Gibson, Ont. Ent. Soc. R. 36, 115, '06.

Gibson, Can. Exp. Farms Ent. C. 2, 6, 1913.

Gillette, Colo. B. 114, 23, 1906.

Gladwin, Rur. N. Y., 1913, 428.

Gossard, O. Farm., Feb. 12, '10, p. 205.

Gossard, Ohio B. 233, 137, 1911.

Hartzell, N. Y. St. B. 331, 494, 1910.

Jarvis, Conn. Storrs B. 56, 254, 1909.

Johnson & Hammar, U. S. B. 89, 17, '10.

Lochhead, Syn. Ec. Ent. 76, 1914.

Morrill, S. W. Stockm., July 24, '14, 7.

O'Kane, Inj. Ins. 264, 1914.

Quaintance & Shear, U. S. F. B. 284, 23, 1907.

Sanderson, Ins. Pests, 515, 1912.

Sill, Pa. Dept. Agr. B. 217, 50, 1912.

Slingerland, Rur. N. Y., 1905, 471.

Slingerland & Crosby, N. Y. C. B. 252, 342, 1908.

Slingerland & Crosby, Man. Fr. Ins. 403, 1914.

Slingerland, Herrick & Crosby, N. Y. C. B. 283, 472, 1910.

Surface, Pa. D. A. Zoöl. V, 12, 384, 1908.

Surface, Pa. D. A. Zoöl. I, 4, 182, 1911.

Symons, Md. B. 101, 153, 1905.

Washburn, Minn. R. 12, 140, 1908.

Haltica evicta

Gibson, Can. Exp. Farms Ent. C. 2, 8, 1913.

Treherne, Can. Exp. Farms Ent. B. 8, 43, 1914.

Haltica foliacea

Merrill, N. Mex. R. 25, 82, 1914.

Morrill, Ariz. Comm. Agr. & Hort. R. 6, 27, 1914.

Slingerland & Crosby, Man. Fr. Ins. 204, 1914.

Haltica ignita

Berger, Fla. R., 1907, xxxix.

Gibson, Can. Exp. Farms Ent. C. 2, 7, 1913.

Herrick, Rur. N. Y., 1909, 842.

O'Kane, Inj. Ins. 266, 1914.

Slingerland & Crosby, Man. Fr. Ins. 370, 1914.

——— U. S. Y. B., 1907, 552.

Haltica punctipennis

Slingerland & Crosby, Man. Fr. Ins. 204, 1914.

Haltica sp.

Gillette, Colo. B. 114, 8, 1906.

Gillette, Better Fr., Feb. 1910, 16.

Haltichella sp. on codling moth

Reed, Ga. Bd. Ent. B. 29, 21, 1909.

Halticus citri, see H. uhleri**Halticus uhleri**

Britton, Conn. R. 4, 217, 1905.

Chittenden, Ins. Inj. Veg. 118, 1907.

Davis, J. Ec. Ent. III, 184, 1910.

Davis, Ill. Ent. R. 27, 113, 1912.

Sanborn, Okla. B. 100, 23, 1912.

——— U. S. Y. B., 1907, 543, 545.

——— U. S. Y. B., 1908, 573.

Halysia 14-punctata

Howard, U. S. R. Ent., 1906, 12.

Hamamelistes spinosus

Felt, N. Y. St. Mus. Mem. 8, 643, '06.

Felt, C. Gentl., 1909, 656.

Felt, J. Ec. Ent. II, 306, 1909.

Felt, N. Y. R. 25, 81, 1910.

- Ham skipper**, *see* *Piophilha casei*
- Haplothrips statice**
Cooley, Mont. B. 98, 124, 1914.
- Harlequin cabbage bug**, *see* *Murgantia histrionica*
- Harmonia picta**
Britton, Conn. B. 181, 14, 1914.
- Harpalus caliginosus**
Slingerland & Crosby, Man. Fr. Ins. 380, 1914.
Symons, Md. B. 101, 198, 1905.
- Harpalus faunus**
Quaintance & Jenne, U. S. B. 103, 153, 1912.
Runner, U. S. D. A. B. 78, 13, 1914.
- Harpalus pennsylvanicus**
Quaintance & Jenne, U. S. B. 103, 153, 1912.
Runner, U. S. D. A. B. 78, 13, 1914.
Slingerland & Crosby, Man. Fr. Ins. 380, 1914.
- Harpalus sp.**
Britton, Conn. Exp. Sta. R. 7, 289, '08.
- Harpalus spp.**
Smith, N. J. B. 225, 35, 1909.
- Harpiphorus ignotus**
Slingerland & Crosby, Man. Fr. Ins. 368, 1914.
- Harpiphorus maculatus**
Chandler, Mo. B. 102, 263, 1912.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 124, 1913.
Fulton, Wright & Gregg, Pa. B. 110, 38, 1911.
Nicholson, Okla. B. 69, 17, 1905.
O'Kane, Inj. Ins. 288, 1914.
Oskamp, Ind. B. 164, 763, 1913.
Quayle, J. Ec. Ent. IV, 525, 1911.
Sanderson, Ins. Pests, 430, 1912.
Slingerland & Crosby, Man. Fr. Ins. 366, 1914.
—— U. S. Y. B., 1906, 517.
- Harpiphorus tarsatus**
Felt, N. Y. R. 26, 59, 1911.
- Harpiphorus versicolor**
Felt, N. Y. R. 26, 60, 1911.
- Harpyia cinerea**
Felt, N. Y. St. Mus. Mem. 8, 559, '06.
- Harrisina americana**
Jones, U. S. B. 68, 77, 1909.
Newell & Rosenfeld, J. Ec. Ent. I, 154, 1908.
- O'Kane, Inj. Ins. 276, 1914.
- Slingerland & Crosby, Man. Fr. Ins. 516, 1914.
—— U. S. Y. B., 1907, 547.
- Hartigia abdominalis**
Essig, Cal. Hort. I, 12, 889, 1912.
Slingerland & Crosby, Man. Fr. Ins. 334, 1914.
—— Pac. Rur. Press LXXXV, 661, 1913.
- Hartigia cressoni**
Essig, Cal. Hort. B. II, 1-2, 279, '13.
- Harvest mite**, *see* *Trombidium*
- Head louse**, *see* *Pediculus capitis*
- Head maggot**, *see* *Oestrus ovis*
- Heart-wood pine borer**, *see* *Chalcophora virginensis*
- Heat and Insects**
Dean, J. Ec. Ent. IV, 142, 1911.
Dean, J. Ec. Ent. VI, 40, 1913.
Felt, N. Y. R. 27, 93, 1912.
Goodwin, J. Ec. Ent. VII, 313, 1914.
- Hecalus lineatus**
Osborn, U. S. B. 108, 64, 1912.
- Hedgehog caterpillar**, *see* *Isia isabella*
- Heilipus lauri**
Barber, Pr. Ent. Soc. Wash. XIV, 181, 1912.
Marlatt, U. S. Fed. Hort. Bd. R. '14, 13.
- Helicobia helicus**
Kelly, J. Agr. Res. II, 441, 1914.
Quaintance & Brues, U. S. B. 50, 127, 1905.
- Heliophila albilinea**, *see* *Meliana*
- Heliophila diffusa**
Washburn, Minn. R. 13, 4, 1910.
Washburn, Minn. B. 123, 70, 1911.
- Heliophila limitata**
Swenk, J. Ec. Ent. IV, 285, 1911.
- Heliophila unipuncta**
Barre & Conradi, S. C. B. 141, 36, '09.
Caesar, Farm & Dairy, Can. July 30, 1914, 2.
Chittenden, Ins. Inj. Veg. 59, 1907.
Conradi, Tex. Stockm. Farm., June 7, 1905, 6.
Cook, Cal. Cult., XXIV, 485, 1905.
Dean, Kans. Agr. Educ. I, 14, 75, '09.
Dean, Kans. Farm., June 6, 1914, 11.
Douglass, Ind. Ent. R. 2, 51, 1910.
Felt, C. Gentl., 1905, 694.
Felt, U. S. B. 60, 89, 1906.

***Heliophila unipuncta* (Cont'd)**

- Felt, N. Y. R. 21, 62, 1906.
 Felt, C. Gentl., 1909, 614.
 Felt, N. Y. R. 25, 94, 1910.
 Fernald, Mass. Bd. Agr. C. 22, 3, '14.
 Fernald & Fernald, Mass. Hatch R. 18, 151, 1906.
 Fletcher, Can. Exp. Farms B. 52, 30, '05.
 Forbes, Ill. Ent. R. 23, 47, 1905.
 Forbès, Or. Judd Farm., June 15, '07, 759.
 Forbes, Prai. Farm., July 15, 1914, 4.
 Gahan, Md. Hort. Soc., 1905, 77, '06.
 Garman, Ky. B. 137, 431, 1908.
 Gibson, Can. Exp. Farms Ent., B. 3, 26, 1912.
 Gossard, O. Farm., Sept. 11, 1909, 197.
 Gossard, Ohio B. 233, 61, 1911.
 Gossard, Ohio P. B. 356, 1914.
 Gossard, O. Farm., Aug. 15, 1914, p. 109.
 Haseman, Mo. Bd. Agr. R. 44, 277, '12.
 Haseman, Mo. P. B. 43, 1914.
 Headlee, Kans. B. 155, 335, 1908.
 Holland, Ent. News, 1907, 454.
 Hunter, U. S. Y. B., 1911, 204.
 Kohler, Iowa Agric., Nov. 1905, 86.
 Lochhead, Syn. Ec. Ent. 63, 1914.
 Metcalf, J. Ec. Ent. I, 354, 1908.
 O'Kane, Inj. Ins. 172, 1914.
 Pettit, Mich. B. 258, 300, 1910.
 Pettit, Mich. Farm., Aug. 8, 1914, v. 143, p. 97.
 Price, Va. C. 7, 68, 1909.
 Quaintance & Brues, U. S. B. 50, 106, '05.
 Sanborn, Okla. B. 100, 59, 1912.
 Sanderson, Ins. Pests, 114, 1912.
 Sherman, N. C. Dept. Agr. B. 26, 5, 36, 1905.
 Sherman, J. Ec. Ent. II, 204, 1909.
 Sherman, N. C. Dept. Agr. B. 35, 5, 35, 1914.
 Sirrine, Rur. N. Y., 1912, 269.
 Smith, N. J. R., 1906, 523, 540.
 Smith, N. J. R., 1907, 427.
 Smith, U. S. B. 67, 35, 1907.
 Smith, N. J. R. 379, 1909.
 Smith, N. J. R., 1910, 351.
 Smith, Farm. Guide, Aug. 15, '14, 2.
 Stedman, Mo. Bd. Agr. R. 38, 311, '06.
 Stene, R. I. Bd. Agr. R. 23, 26, '08.
 Surface, Pa. D. A. Zoöl. I, 1, 27, '11.
 Surface, Pa. D. A. Zoöl. III, 1, 26, '13.
 Swenk, Nebr. Bd. Agr. R. f. '08, 291.
 Swenk, Nebr. Ent. B. 1, 41, 1913.
 Symons, U. S. B. 60, 83, 1906.
 Troop, Ind. Bd. Agr. R. 55, 476, '07.
 Troop, Ind. R. 27, 48, 1914.
 Washburn, Minn. Ent. R. 11, 59, '06.
 Webster, U. S. B. 67, 98, 1907.
 Webster, U. S. Y. B., 1907, 246.
 Webster, U. S. Y. B., 1908, 371.
 Webster, Can. Ent., 1913, 16.
 Weldon, Md. Hort. Soc., 1907, 65, '08.
 Willard, Farm & Ranch, May 31, '13, 13.
 ——— Agr. Gaz. Can., Aug. '14, 625.
 ——— Mich. Farm., July 29, 1905, v. 48, p. 72.
 ——— Pac. Rur. Press, LXIX, 311, '05.
 ——— Pac. Rur. Press, LXXXVII, 687, 1914.
 ——— U. S. Y. B., 1905, 634.
 ——— U. S. Y. B., 1906, 510.
 ——— U. S. Y. B., 1907, 543.

***Heliophilus* sp.**

Hanby, Journ. Amer. Med. Assoc. XLV, 1850, 1905.

Hanby, Ala. Med. Jr., XVII, 632, '06.

Heliiothis armiger*, see *H. obsoleta***Heliiothis obscura* see *H. obsoleta******Heliiothis obsoleta***

- Baldwin, Ind. Ent. R. 5, 148, 1912.
 Barre & Conradi, S. C. B. 141, 31, '09.
 Bartlett, South. Plant., Oct. '06, 805.
 Becker, South. Cult., Aug. 15, '14, 27.
 Bentley, Tenn. Bd. Ent. R. f. '13, 20.
 Bethune, Ont. Agr. Coll. B. 171, 23, 35, 1909.
 Bethune, Ont. Agr. Coll. R. 35, 29, '10.
 Bishopp, J. Ec. Ent. III, 314, '10.
 Bishopp & Jones, U. S. F. B. 290, 7, '07.
 Bremner, Cal. Hort. Comm. Destr. Ins. 1910, 7.
 Britton, Conn. R. 8, 847, 1909.
 Bruner, Nebr. Ent. R. f. 1907–1908, 9.
 Chittenden, Ins. Inj. Veg. 113, 207, 233, 1907.
 Clarke, Cal. Cult., XXVI, 187, 1906.
 Clarke, Ala. Poly. B. 139, 12, 1907.
 Conradi, Tex. B. 89, 36, 1907.
 Cook, Cal. Hort. B. II, 6, 555, 1913.
 Cooley, Mont. B. 62, 219, 1905.
 Cooley, Mont. B. 92, 59, 1912.
 Dean, Kans. Farm, Sept. 12, '07, 1017.
 Dean, Farm & Ranch, Mar. 30, 1912, 12.
 Dean, Kans. Agr. Educ. I, 4, 23, 1909.

Heliothis obsoleta (Cont'd)

- Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 227, 1907.
 Essig, Cal. Hort. B. II, 1-2, 164, 1913.
 Felt, N. Y. R. 24, 55, 1909.
 Fletcher, Can. Exp. Farms B. 52, 20, '05.
 Forbes, Ill. Ent. R. 23, 67, 1905.
 Fulton, Wright & Gregg, Pa. B. 110, 39, 1911.
 Garcia, N. Mex. B. 68, 13, 1908.
 Garman, Ky. B. 145, 297, 1909.
 Garman & Jewett, Ky. B. 187, 513, '14.
 Gossard, Ohio B. 233, 72, 1911.
 Haseman, Mo. Bd. Agr. R. 44, 275, '12.
 Hayhurst, Farm & Ranch, Aug. 26, 1911, 10.
 Headlee, Kans. C. 7.
 Headlee, Kans. R. 21, xlviii, 1908.
 Headlee, J. Ec. Ent. III, 149, 1910.
 Headlee, N. J. Hort. Soc., 1913, 54.
 Henderson, Deseret Farm., Nov. 9, 1905, 3.
 Hinds, U. S. B. 59, 29, 1906.
 Hooker, U. S. B. 67, 106, 1907.
 Howard, U. S. R. Ent., 1905, 278.
 Howard, U. S. R. Ent., 1906, 7.
 Hunter, Farm & Ranch, Aug. 22, '08, 9.
 Hunter, U. S. F. B. 344, 38, 1909.
 Hunter, U. S. F. B. 512, 39, 1912.
 Kohler, Iowa Agric., Nov. 1905, 86.
 Lewis, Pr. Ga. Hort. Soc. f. 1912, 11.
 Lochhead, Syn. Ec. Ent. 63, 1914.
 Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 15, 1906.
 Lovett, Oreg. Coll. B. 91, 14, 28, 1913.
 Metcalf, N. C. Dept. Agr. Sp. B. 36, '09.
 Miller, Kans. Farm., Mar. 12, 1910, 26.
 Morgan, U. S. Y. B., 1910, 288.
 Morrill, S. W. Stockm., Nov. 28, '13, 10.
 Morrill, Ariz. Comm. Agr. & Hort. R. 6, 40, 1914.
 Newell, Farm & Ranch, June 15, '07, 3.
 Newell, La. Crop Pest Comm. C. 19, '07.
 Newell, La. Hort. Soc., 1908, 49.
 Newell, Tex. Stockm. Farm., Feb. 16, 1910, 4.
 Newell, Tex. Stockm. Farm., May 24, 1911, 15.
 Newell & Rosenfeld, J. Ec. Ent. I, 151, 1908.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 108, 1909.
 Newell & Smith, U. S. B. 52, 70, 1905.
 O'Kane, Inj. Ins. 211, 1914.
 Osborn, J. Ec. Ent. I, 145, 1908.
 Pettit, Mich. B. 233, 211, 1906.
 Pettit, Mich. B. 258, 297, 1910.
 Quaintance & Bishopp, U. S. F. B. 212, 1905.
 Quaintance & Brues, U. S. B. 50, 11, '05.
 Rolfs, Fla. B. 91, 30, 1907.
 Sanborn, Okla. B. 100, 34, 1912.
 Sanderson, Ins. Pests, 181, 234, 254, '12.
 Sherman, N. C. Dept. Agr. B. 26, 5, 39, 1905.
 Sherman, N. C. Dept. Agr. B. 29, 6, 33, 1908.
 Sherman, N. C. Dept. Agr. B. 35, 5, 45, 1914.
 Slingerland, Rur. N. Y., 1907, 589.
 Smith, Ga. Bd. Ent. B. 16, 29, 1905.
 Smith, Ga. Bd. Ent. B. 20, 168, 1906.
 Smith, U. S. B. 67, 101, 1907.
 Smith, N. C. B. 197, 37, 58, 1908.
 Smith & Lewis, U. S. B. 60, 80, 1906.
 Stedman, Iowa Home., Mar. 23, 1905, p. 507.
 Stedman, Mo. Bd. Agr. B. 8, 47, 1905.
 Stedman, Mo. Bd. Agr. R. 38, 325, '06.
 Surface, Pa. D. A. Zool. V, 12, 377, '08.
 Swenk, Nebr. Ins. Pest Bur. C. 9, 1, '08.
 Swenk, Nebr. Bd. Agr. R. f. 1910, 364.
 Swenk, Nebr. Farm., Oct. 25, 1911, p. 1021.
 Swenk, Nebr., Ent. B. 1, 57, 1913.
 Symonds, Md. B. 101, 164, 1905.
 Titus, U. S. B. 54, 88, 1905.
 Titus, Deseret Farm., Feb. 17, '11, 551.
 Troop, Farm. Guide, Aug. 22, 1914, 20.
 Washburn, U. S. B. 60, 85, 1906.
 Watson, Fla. B. 112, 21, 1912.
 Watson, Fla. B. 125, 57, 1914.
 Wildermuth, U. S. C. 133, 8, 1911.
 Wildermuth, U. S. D. A. B. 124, 25, '14.
 Worsham, J. Ec. Ent. II, 209, 1909.
 ——— C. Gentl., 1909, 859.
 ——— C. Gentl., 1910, 703.
 ——— Pac. Rur. Press, LXXXII, 223, 1911.
 ——— Pac. Rur. Press, LXXXVIII, 395, 1914.
 ——— Rur. N. Y., 1912, 1117.
 ——— Rur. N. Y., 1913, 565.
 ——— U. S. Y. B., 1905, 631, 634.

- U. S. Y. B., 1906, 508, 509.
 ——— U. S. Y. B., 1907, 542, 545.
 ——— U. S. Y. B., 1908, 567, 568, 569, 573.
- Heliothis obsoleta and toads**
 Quaintance & Brues, U. S. B. 50, 112, 1905.
- Heliothis obsoleta, quarantine**
 Newell, La Crop Pest Comm. C. 7, 8, 1906.
- Heliothis rhexiae, see Chloridea virescens**
- Heliothrips fasciatus**
 Bremner, Cal. Hort. Comm. Destr. Ins. 20, 1910.
 Essig, Cal. Hort. B. II, 1-2, 29, '13.
 Morrill, Cal. Hort. B. I, 5, 162, '12.
 Russell, U. S. B. 118, 7, 1912.
 Shaw, U. S. D. A. B. 104, 2, 1914.
- Heliothrips femoralis**
 ——— U. S. Y. B., 1905, 636.
- Heliothrips haemorrhoidalis**
 Davis, J. Ec. Ent. III, 183, 1910.
 Essig, Cal. Hort. B. II, 1-2, 31, 1913.
 Morrill, Cal. Hort. B. I, 5, 162, 1912.
 O'Kane, Inj. Ins. 203, 1914.
 Quayle, Cal. B. 214, 491, 1911.
 Russell, U. S. B. 64, 43, 1909.
 Russell, U. S. C. 151, 1, 1912.
 Watson, Fla. R., 1913, lxxv.
 ——— U. S. Y. B., 1908, 578.
- Heliothrips rubrocinctus**
 Russell, U. S. B. 99, 17, 1912.
- Hellebore**
 Garman, Ky. B. 147, 12, 1910.
 Jarvis, Conn. Storrs B. 56, 226, '09.
 Morris & Parker, Mont. C. 36, 235, '14.
 Slingerland & Crosby, N. Y. C. B. 252, 347, 1908.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 476, 1910.
 Smith, N. J. B. 200, 20, 1907.
 Smith, N. J. B. 213, 29, 1908.
 Stone & Fernald, Mass. B. 123, 10, '08.
 Surface, Pa. D. A. Zool. I, 4, 183, '11.
 Taft, Mich. Hort. Soc., 1908, 145, '09.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 484, 1911.
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 1, p. 8, 1914.
- Hellula undalis**
 Barre & Conradi, S. C. B. 141, 51, '09.
 Chittenden, Ins. Inj. Veg. 142, '07.
 Chittenden & Marsh, U. S. B. 109, 23, 1912.
 O'Kane, Inj. Ins. 185, 1914.
 Sanborn, Okla. B. 100, 19, 1912.
 Sanderson, Ins. Pests, 365, 1912.
 Sherman, N. C. Dept. Agr. B. 32, 7, 32, 1911.
 Smith, N. C. B. 197, 23, 1908.
 Smith, Prog. Farm., Sept. 3, 1908, 15.
 ——— U. S. Y. B., 1905, 629.
 ——— U. S. Y. B., 1907, 544.
 ——— U. S. Y. B., 1908, 571.
- Helochara communis**
 Osborn, U. S. B. 106, 60, 1912.
- Helops cistelioides**
 Simes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 17.
- Helops micans**
 Simes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 17.
- Helotropha atra**
 Forbes, Ill. Ent. R. 23, 78, 1905.
 Pettit, Mich. B. 233, 205, 1906.
- Hemerobius californicus**
 Quayle, J. Ec. Ent. VI, 87, 1913.
- Hemerobius pacificus**
 Ewing, Oreg. B. 121, 57, 1914.
 Moznette, Oreg. Bien. Crop Pest R. f. 1913-1914, 181.
 Quayle, Cal. B. 234, 516, 1912.
- Hemerobius sp.**
 Sanborn, Okla. B. 98, 14, 1912.
 Tucker, La. B. 145, 7, 1914.
- Hemerobius stigmaterus**
 Felt, N. Y. St. Mus. Mem. 8, 697, '06.
- Hemerocampa antiqua**
 Bailey, Vt. Agr. R. 6, 41, 1914.
 Brittain, Pr. Ent. Soc. B. C., 4, 14, '14.
 Byrne, Green's Fr. Grow., Mar. '13, 30.
 Cooley, Mont. B. 79, 52, 1910.
 Felt, N. Y. St. Mus. Mem. 8, 524, '06.
 Gentner, Oreg. Bien. Crop Pest R. f. 1913-1914, 173.
 Gibson, Ont. Ent. Soc. R. 42, 14, '12.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 349.
 Marlatt, U. S. Fed. Hort. Bd. R. 8, '14.
 O'Kane, Inj. Ins. 295, 1914.
 Parrott, J. Ec. Ent. II, 305, '09.
 Patch, Me. B. 108, 164, 1905.
 Patch, Me. B. 123, 213, 1905.
 Sanderson, N. H. R. 17-18, 328, 1906.

- Slingerland & Crosby, *Man. Fr. Ins.* 105, 1914.
- Woods, *Me. B.* 137, 296, 1906.
- Hemerocampa definita**
- Bailey, *Vt. Agr. R.* 6, 43, 1914.
- Britton, *Conn. R.* 13, 253, 1914.
- Felt, *N. Y. St. Mus. Mem. S.* 522, '06.
- O'Kane, *Inj. Ins.* 295, 1914.
- Patch, *Me. B.* 108, 164, 1905.
- Sanderson, *N. H. R.* 17-18, 331, '06.
- Hemerocampa inornata**
- Howard, *U. S. B.* 54, 80, 1905.
- Hemerocampa leucostigma**
- Bailey, *Vt. Agr. R.* 6, 42, 1914.
- Bethune, *Ont. Ent. Soc. R.* 36, 11, '06.
- Bethune, *Ont. Agr. Coll. B.* 158, 7, '07.
- Bethune, *Ont. Agr. Coll. R.* 32, 45, '07.
- Britton, *Conn. R.* 5, 230, 1906.
- Brues, *Wis. Hort. Soc. R. f.* 1906, 17.
- Buckley, *Me. Dept. Agr. B. X*, 3, 2, 1911.
- Burgess, *J. Ec. Ent. V.* 174, 1912.
- Byrne, *Green's Fr. Grow.*, Mar. '13, 30.
- Caesar, *Ont. Ent. Soc. R.* 42, 29, 1912.
- Cotton, *Ohio Nurs. Orch. Insp. B.* 7, 39, 1906.
- Davis, *J. Ec. Ent.* III, 185, 1910.
- Dean & Peairs, *Kans. Agr. Educ.* VI, 2, 47, 1913.
- Douglass, *Ind. Ent. R.* 1, 124, 1908.
- Douglass, *Ind. Ent. R.* 2, 53, 1910.
- Douglass, *Ind. Ent. R.* 3, 116, 1910.
- Douglass, *Ind. Ent. R.* 4, 127, 1912.
- Felt, *N. Y. R.* 20, 405, 1905.
- Felt, *N. Y. R.* 21, 95, 1906.
- Felt, *N. Y. Fr. Grow. Assoc.*, 1906, 120.
- Felt, *U. S. B.* 60, 90, 1906.
- Felt, *N. Y. R.* 22, 55, 1907.
- Felt, *N. Y. St. Mus. B.* 109, 6, 1907.
- Felt, *U. S. B.* 67, 41, 1907.
- Felt, *C. Gentl.*, 1908, 107.
- Felt, *J. Ec. Ent. I.*, 150, 276, 1908.
- Felt, *N. Y. R.* 23, 38, 1908.
- Felt, *Grape Belt*, 17 July, 1908.
- Felt, *N. Y. R.* 24, 51, 1909.
- Felt, *N. Y. St. Mus. Mem. S.* 132, 1905.
- Felt, *N. Y. St. Mus. B.* 156, 14, 1912.
- Felt, *N. Y. R.* 27, 109, 1912.
- Fernald, *Mass. B.* 125, 52, 1908.
- Forbes, *Ill. B.* 151, 472, 1911.
- Forbes, *Ill. Ent. R.* 26, 10, 1911.
- Fulton Wright & Gregg, *Pa. B.* 110, 17, 1911.
- Funk, *Pa. Dept. Agr. B.* 152, 219, 1907.
- Garman, *Ky. B.* 133, 41, 1908.
- Girault, *Ent. News*, 1905, 167.
- Gossard, *Ohio B.* 164, 15, 1905.
- Gossard, *Ohio B.* 233, 95, 1911.
- Hahn, *Ont. Ent. Soc. R.* 39, 13, 1909.
- Hall, *Better Fr. Mar.* 1911, 35.
- Haseman, *Mo. Hort. Soc.*, 1911, 240.
- Hewitt, *Ont. Ent. Soc. R.* 41, 29, 1911.
- Hitchings, *Me. Ent. R.* 5, 10, 1910.
- Houser, *Ohio B.* 194, 182, 1908.
- Howard, *U. S. B.* 54, 80, 1905.
- Howard, *U. S. B.* 91, 100, 1911.
- Johannsen & Patch, *Me. Com. Agr. f.* 1910, 349.
- Jordan, *N. Y. St. B.* 321, 453, 1909.
- Lamson, *Conn. Storrs B.* 71, 76, 1912.
- Lochhead, *Ont. Ent. Soc. R.* 36, 138, '06.
- Lochhead, *Can. Hort. XXXII*, 109, '09.
- Lochhead *Syn. Ec. Ent.* 65, 1914.
- Lyman, *Ent. Soc. Ont. R.* 36, 18, 1906.
- Mason, *J. Ec. Ent. VII*, 252, 1914.
- Nash, *Ont. Ent. Soc. R.* 42, 18, 1912.
- O'Kane, *Inj. Ins.* 295, 1914.
- Osborn, *J. Ec. Ent. I*, 145, 1908.
- Parrott, *N. Y. Fr. Grow. Assoc.* '09, 23.
- Patch, *Me. B.* 108, 164, 1905.
- Patch, *Me. B.* 123, 213, 1905.
- Penhallow, *Can. Hort. XXIX*, 275, '06.
- Pettit, *Mich. B.* 251, 286, 1908.
- Pettit, *Mich. Farm.*, Aug. 21, '09, v. 133, p. 142.
- Pettit, *Nat'l Fr. Grow.*, Sept. 1909, 8.
- Rodgers, *Cal. Fr. Grow.*, Mar. 10, '06, 3.
- Sanderson, *N. H. R.* 17-18, 330, 1906.
- Schoene, *N. Y. St. B.* 312, 40, 1909.
- Schoene & Fulton, *N. Y. St. C.* 25, 7, 1913.
- Sears, *C. Gentl.*, 1907, 700.
- Shaw, *Ohio Bd. Agr. R.* 63, 1908, 695.
- Shaw, *Ohio Nurs. Orch. Insp. R.* 7, 17, 1909.
- Slingerland & Crosby, *Man. Fr. Ins.* 100, 1914.
- Smith, *N. J. B.* 181, 33, 1905.
- Smith, *N. J. R.*, 1905, 560.
- Smith, *N. J. R.*, 1908, 314.
- Smith, *N. J. R.*, 1910, 346.
- Stedman, *Mo. Hort. Soc.*, 1905, 281.
- Stene, *R. I. Bd. Agr. R.* 21, 58, 1906.
- Stene, *R. I. Nurs. Insp.* 42, 1906.
- Stene, *R. I. Bd. Agr. R.* 24, 129, 1909.

Hemerocampa leucostigma (*Cont'd*)

- Stene, R. I. Bd. Agr. R. f. 1909, 74, '10.
 Surface, Pa. D. A. Zoöl. V, 12, 381, '08.
 Surface, Pa. D. A. Zoöl. I, 1, 33, 1911.
 Surface, Pa. D. A. Zoöl. I, 4, 172, 1911.
 Swenk, Nebr. Hort. Soc. B. 19, 11, 1908.
 Swenk, Nebr. Ins. Pest. Bur. C. 6, 1, '08.
 Swenk, Nebr. Hort. Soc., 1909, 92.
 Symons, Md. B. 101, 137, 1905.
 Tucker, Kans. Farm., Aug. 9, 1906, 831.
 Washburn, Minn. R. 12, 112, 1908.
 Webster, J. Ec. Ent. II, 463, 1909.
 Weiss, N. J. R., 1912, 428.
 Williams, Ont. Ent. Soc. R. 36, 9, 1906.
 Williams, Ont. Ent. Soc. R. 37, 17, 1907.
 Williams, Ont. Ent. Soc. R. 39, 10, 1909.
 Williams, Ont. Ent. Soc. R. 40, 14, 1910.
 Woods, Me. B. 137, 296, 1906.
 Young, Ont. Ent. Soc. R. 35, 5, 1905.
 Young, Pr. Columbus Hort. Soc., '06, 73.
 ——— C. Gentl., 1908, 886.
 ——— U. S. Y. B., 1906, 514.
 ——— U. S. Y. B., 1907, 550.
 ——— U. S. Y. B., 1908, 576, 577.

Hemerocampa leucostigma, *parasites*

- Swenk, Nebr. Hort. Soc., 1909, 117.

Hemerocampa oslari

- Burke, Pro. Ent. Soc. Wash. VIII, 143, 1907.
 ——— U. S. Y. B., 1906, 515.
 ——— U. S. Y. B., 1907, 549.

Hemerocampa sp.

- U. S. Y. B., 1906, 512.

Hemerocampa vetusta

- Bremner, Cal. Hort. Comm. Destr. Ins. 10, 1910.
 Cooper, Cal. Hort. Comm. Ins. & Insect., 1905, 12.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 226, 1907.
 Essig, Cal. Hort. B. II, 1-2, 178, 1913.
 Slingerland & Crosby, Man. Fr. Ins. 104, 1914.
 Volck, Cal. B. 183, 191, 1907.
 Volck, Cal. Cult., XXVIII, 211, 19, '07.
 Volck, Pac. Rur. Press. LXXV, 161, '08.
 Wilson, Oreg. Bien. Crop Pest R. f., 1911-1912, 152.
 ——— U. S. Y. B., 1907, 547.

Hemichionaspis aspidistrae

- Britton, Conn. R. 10, 710, 1911.

- Carnes, Cal. Hort. Comm. Bien. R. 2, 203, 1907.

- Davis, Ill. Ent. R. 27, 126, 1912.

Hemichionaspis minor

- Watson, Fla. R., 1913, lxxi.

Hemileuca hualapai

- U. S. Y. B., 1908, 570.

Hemileuca maia

- Felt, N. Y. St. Mus. Mem. 8, 310, 1905.
 Herrick, Household Ins. 429, 1914.
 Hitchings, Me. Ent. R. 3, 7, 1908.

Hemileuca oliviae

- Ainslie, U. S. B. 85, 59, 1910.
 Wildermuth, S. W. Stockm., Aug. 22, 1913, 1.
 Wildermuth, S. W. Stockm., Sept. 5, 1913, 3.

Hemileuca sp.

- Howard, U. S. R. Ent., 1914, 10.

Hemingway's Pure Lead Arsenate

- U. S. D. A. Ins. & Fung. No. 112, 1913.
 ——— U. S. D. A. Ins. & Fung. No. 120, 1913.

Hemirhipus fascicularis

- Hopkins, U. S. B. 58, 35, 1907.

Hemisarcoptes malus

- Cooley, Mont. B. 92, 55, 1912.
 Ewing, Psyche, 1912, 124.

Hemiscopsis cinerea

- Britton, Conn. R. 10, 696, 1911.

Hemispherical scale, *see* **Saissetia hemispherica****Hemiteles** sp.

- Johannsen & Patch, Me. B. 195, 242, '11.

Hemiteles sp. on alfalfa weevil

- Webster, U. S. B. 112, 39, 1912.

Hemiteles sp. on beet web-worm

- Chittenden, U. S. B. 127, 9, 1913.

Hén flea *see* **Sarcopsylla gallinacea****Hermetia chrysopila**

- Hunter, Pratt & Mitchell, U. S. B. 113, 38, 1912.

Hesperotettix sp.

- Hunter, Cal. B. 170, 6, 1905.

Hesperotettix speciosus

- Bruner, U. S. B. 54, 61, 1905.
 Forbes, Ill. Ent. R. 23, 142, 1905.

Hessian fly, *see* **Mayetiola destructor****Heterocampa guttivitta**

- Britton, Conn. R. 8, 848, 1909.
 Burgess & Collins, U. S. Y. B., 1911, 460.

- Felt, C. Gentl., 1908, 107.
 Felt, J. Ec. Ent. I, 150, 1908.
 Felt, N. Y. R. 23, 21, 1908.
 Fernald, Mass. R. 21, I, 76, 1909.
 Fiske & Burgess, J. Ec. Ent. III, 389, '10.
 Hillman, N. Eng. Farm., Aug. 15, 1908, p. 3.
 Hitchings, Me. Comm. Agr. R., 1908, 199, 1909.
 Hitchings, J. Ec. Ent. III, 146, 1910.
 Hitchings, Me. Ent. R. 4, 7, 1909.
 Hitchings, Me. Dept. Agr. B. vol. IX, 1, 18, 1910.
 Hitchings, Me. Ent. R. 5, 11, 1910.
 Jackson, N. H. R. 19-20, 514, 1908.
 Johannsen, Me. B. 177, 22, 1910.
 Johannsen, Me. B. 187, 2, 1911.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 345.
 Patch, Me. B. 148, 262, 1907.
 Patch, Me. B. 161, 312, 1908.
 Patch, Me. B. 162, 353, 1908.
 Sanderson, J. Ec. Ent. III, 210, 1910.
 Slingerland & Crosby, Man. Fr. Ins. 127, 1914.
 ——— U. S. Y. B., 1908, 575, 576, 577.
- Heterocampa manteo**
 Hooker, Pr. Ent. Soc. Wash. X, 8, '08.
- Heterocordylus malinus**
 Caesar, Ont. Ent. Soc. R. 43, 103, '13.
 Crosby, Can. Ent., 1911, 17.
 Crosby, N. Y. C. B. 291, 213, 1911.
 Crosby, N. Y. Dept. Agr. B. 28, 74, '11.
 Felt, N. Y. Fr. Grow. Assoc., '10, 35.
 Felt, N. Y. R. 26, 44, 1911.
 Felt, N. Y. Fr. Grow. Assoc., '14, 23.
 O'Kane, Inj. Ins. 348, 1914.
 Parrott, N. Y. Dept. Agr. B. 50, 1741.
 Parrott, J. Ec. Ent. VI, 64, 1913.
 Parrott, N. Y. Fr. Grow. Assoc., '13, 253.
 Schoene & Fulton, N. Y. St. C. 25, 3, '13.
 Slingerland, N. Y. Fr. Grow. Assoc., 1909, 122.
 Slingerland & Crosby, Man. Fr. Ins. 28, 1914.
 Stewart, Pa. B. 128, 126, 1914.
- Heterospilus mordellistenae**
 Phillips, U. S. B. 95, 9, 1911.
- Hickory bark-beetle**, *see* **Scolytus quadrispinosus**
- Hickory gall aphid**
 Felt, C. Gentl., 1905, 564.
- Hickory horned devil**, *see* **Citheronia regalis**
- Hickory husk-worm**, *see* **Grapholitha caryana**
- Hickory insects**
 Surface, Pa. D. A. Zool. II, 6, 238, '12.
- Hickory nut weevil**, *see* **Balaninus caryae**
- Hickory timber-beetle**, *see* **Xyleborus celsus**
- Hickory tussock caterpillar**, *see* **Halisidota caryae**
- Hickory twig-girdler**, *see* **Oncideres cingulata**
- Hippelates fly**, *see* **Hippelates flavipes**
- Hippodamia ambigua**
 Davidson, U. S. D. A. B. 100, 38, 1914.
 Essig, Cal. Hort. B. II, 1-2, 204, 1913.
 Fernald, Mass. R. 25, II, 86, 1913.
 Gates, J. Ec. Ent. V, 231, 1912.
 Isaac, Bug *vs.* Bug, 17, 1906.
 Russell, U. S. D. A. B. 90, 10, 1914.
 ——— Cal. Fr. Grow., Sept. 9, 1905, 1.
- Hippodamia duodecimpunctata**
 Britton, Conn. B. 181, 21, 1914.
 Patch, Me. B. 147, 248, 1907.
- Hippodamia convergens**
 Bremner, Cal. Hort. Comm. Destr. Ins. 1910, 22.
 Britton, Conn. B. 181, 18, 1914.
 Carnes, Cal. Hort. B. I, 3, 71, 1912.
 Carnes, Cal. Hort. B. I, 5, 177, 1912.
 Carnes, Cal. Hort. B. I, 10, 820, 1912.
 Chittenden, U. S. C. 80, 6, 1906.
 Chittenden, Va. Truck Exp. Sta. B. 2, 24, 1909.
 Cook, Cal. Hort. Comm. Bien. R. 5, 17, 1912.
 Cook, Cal. Cult. XL, 363, 1913.
 Cook, Cal. Hort. B. II, 5, 541, 1913.
 Cook, Pac. Rur. Press, LXXXV, 475, 1913.
 Cowan, Farm & Ranch, June 25, 1910, 1.
 Essig, Pom. Jr. Ent. III, 607, 1911.
 Essig, Cal. Hort. B. I, 7, 286, 1912.
 Essig, Cal. Hort. B. II, 1-2, 202, 1913.
 Ewing, Oreg. B. 121, 63, 1914.
 Garman & Jewett, Ky. B. 187, 582, '14.
 Herrick, J. Ec. Ent. IV, 222, 1911.
 Herrick & Hungate, N. Y. C. B. 300, 736, 1911.
 Isaac, Bug *vs.* Bug, 15, 1906.
 Marsh, U. S. B. 64, 74, 1910.

Hippodamia convergens (*Cont'd*)

- McGregor, U. S. C. 150, 9, 1912.
 McGregor, U. S. C. 172, 16, 1913.
 Morrill, Ariz. Comm. Agr. & Hort. R. 6, 37, 1914.
 Newell & Smith, U. S. B. 52, 70, 1905.
 Palmer, Ann. Ent. Soc. Am. VII, 213, 1914.
 Parker, U. S. B. 111, 22, 1913.
 Quaintance, U. S. C. 102, 6, 1908.
 Russell, U. S. B. 118, 42, 1912.
 Sanborn, Okla. B. 98, 8, 1912.
 Smith, Nebr. Ins. Pest Bur. C. 1, 3, '08.
 Smith, Nebr. Ins. Pest. Bur. C. 4, 2, '08.
 Smith, Nebr. Bd. Agr. R. f. '08, 314, 324.
 Smith, Prog. Farm., Aug. 12, '11, 691.
 Smyth, Kans. Farm., June 6, '07, 674.
 Swenk, Nebr. Bd. Agr. R. f. '10, 366.
 Tucker, La. B. 145, 7, 1914.
 Webster, U. S. C. 85, 5, 1907.
 Webster, J. Ec. Ent. III, 503, 1910.
 Webster, U. S. B. 112, 31, 1912.
 Webster & Phillips, U. S. B. 110, 129, '12.
 ——— Cal. Fr. Grow., Nov. 11, '11, 4.
 ——— Cal. Fr. Grow., Mar. 15, '13, 5.

Hippodamia glacialis

- Britton, Conn. B. 181, 20, 1914.

Hippodamia lecontii

- Essig, Cal. Hort. B. II, 1-2, 202, '13.

Hippodamia parenthesis

- Britton, Conn. B. 181, 20, 1914.
 Palmer, Ann. Ent. Soc. Am. VII, 218, 1914.
 Webster, U. S. C. 85, 5, 1907.

Hippodamia 5-signata

- Essig, Cal. Hort. B. II, 1-2, 201, '13.

Hippodamia sinuata

- Palmer, Ann. Ent. Soc. Am. VII, 217, 1914.

Hippodamia spuria

- Webster, U. S. B. 112, 31, 1912.

Hister parallelus

- Felt, N. Y. St. Mus. Mem. 8, 491, '06.

Histiostoma tarsalis

- Mitzmain, Pub. Health R. XXV, 393, 1910.

Hodge fly trap

- Hodge, J. Ec. Ent. VI, 110, 1913.

Hog caterpillar, see Papilio thoas**Hog louse, see Haematopinus urius****Holcaspis duricoria**

- Felt, N. Y. St. Mus. Mem. 8, 624, '06.

Holcaspis globulus

- Felt, N. Y. St. Mus. Mem. 8, 624, '06.

Holcocera maligemmella

- Slingerland & Crosby, Man. Fr. Ins. 45, 1914.

Holcocneme erichsonii, see Nematus**Homaledra sabaella**

- Rosenfeld, J. Ec. Ent. III, 217, '10.

Homalodisca triquetra

- Quaintance & Brues, U. S. B. 50, 106, 1905.

- Sanborn, Okla. B. 100, 70, 1912.

- Sanderson, U. S. F. B. 223, 18, 1905.

- Sanderson, U. S. B. 57, 49, 1906.

- Sanderson, Ins. Pests, 249, 1912.

Homalomyia brevis

- Howard, U. S. C. 71, 2, 1906.

- Howard, U. S. F. B. 459, 6, 1911.

Homalomyia canicularis

- Blankmeyer, Jr. Amer. Med. Assoc. XLVIII, 1505, 1907.

- Campbell & Cooper, Jr. Amer. Med. Assoc. LIII, 1160, 1909.

- Doane, Ins. Disease, 49, 1910.

- Herrick, Household Ins. 47, 1914.

- Howard, U. S. C. 71, 2, 1906.

- Howard, U. S. F. B. 459, 6, 1911.

Homohadena badistriga

- Gibson, Ont. Ent. Soc. R. 36, 118, 1906.

Homoporus chalcidiphagus

- Webster, U. S. C. 66, Rev. Ed. 4, 1908.

- Webster, U. S. C. 106, 8, 1909.

Homoptera lunata

- Felt, N. Y. St. Mus. Mem. 8, 538, 1906.

Homotropus bicapillaris

- Washburn, Minn. R. 12, 131, 1908.

Honeydew

- Felt, N. Y. R. 25, 84, 1910.

Hooded plant-bug, see Euthoctha galeator**Hooper's Fatal Food for Roaches**

- U. S. D. A. Ins. & Fung. No. 77, 1913.

Hoplia callipyge

- Essig, Cal. Hort. B. II, 1-2, 232, 1913.

Hop aphid, see Phorodon humuli**Hop flea-beetle, see Psylliodes punctulata****Hop grub, see Gortyna immanis****Hop plum aphid, see Phorodon humuli****Hoplia sackenii**

- Pac. Rur. Press, LXXIX, 403, 1910.

- Hoplia trifasciata**
Felt, N. Y. R. 27, 98, 1912.
- Hoplia trivialis**
Smith, U. S. B. 67, 104, 1907.
- Hoplocampa cookei**
Essig, Cal. Hort. B. III, 1, 31, 1914.
Foster, U. S. B. 116, 73, 1913.
Slingerland & Crosby, Man. Fr. Ins. 307, 1914.
——— Pac. Rur. Press LXXXV, 332, 1913.
- Hoplocephala bicornis**
Felt, N. Y. St. Mus. Mem. 8, 498, 1906.
- Hoplopsyllus anomalus**
Doane, Ins. Disease, 156, 1910.
McCoy, Pub. Health R. XXIV, 194, '08.
- Hop-plant borer**, *see* **Hydroecia immanis**
- Hop plant-louse**, *see* **Phorodon humuli**
- Hop snout-moth**, *see* **Hypena humuli**
- Horicum**
Stewart, W. Va. R. f., 1907-1908, 12.
- Horismenus microgastri**
Burgess, Ohio Nurs. Orch. Insp. R. 4, 14, 1906.
Burgess, U. S. B. 60, 73, 1906.
Cotton, Ohio Nurs. Orch. Insp. B. 7, 51, 1906.
- Horismenus popenoei**
Quaintance, U. S. B. 68, 29, 1907.
- Horistonotus curiatus**, *see* **H. uhleri**
- Horistonotus uhleri**
Conradi, S. C. R. 24, 56, 1911.
Conradi, S. C. R. 26, 22, 1913.
Conradi & Egerton, S. C. B. 180, '14, 3.
Thomas, S. C. B. 155, 3, 1911.
- Hormaphis hamamelidis**
Felt, N. Y. St. Mus. Mem. 8, 639, 1906.
Felt, N. Y. R. 22, 59, 1907.
Felt, N. Y. R. 25, 82, 1910.
- Hormorus undulatus**
Britton, Conn. R. 5, 259, 1906.
- Hornblower**, *see* **Phlegethontius sexta**
- Horned squash bug**, *see* **Anasa armigera**
- Hornets as fly catchers**
Herrick, Rur. N. Y., 1910, 515.
- Horn fly**, *see* **Haematobia serrata**
- Hornworm**, *see* **Phlegethontius quinque-maculata** and **P. sexta**
- Horse bot-fly**, *see* **Gastrophilus equi**
- Horse flies**
Dalrymple, Amer. Vet. Rev. XXX, 939, 1906.
Hine, Tech. B. 12, pt. 2, U. S. Bur. Ent. 1906.
Kaupp, Anim. Parasites, 19, 1908.
- Horse flies and surra**
Mitzmain, Bull. 94, Publ. Health Hyg. Lab., 7, 1914.
- Horse flies**, *see also* **Tabanus**
- Horse-radish flea-beetle**, *see* **Phyllotreta armoraciae**
- Horticultural compound**
Smith, N. J. R., 1904, 648.
- Horticultural laws**
Jeffrey, Cal. Cult. XXXVI, 707, 1911.
Roeding, Cal. Cult. XL, 99, 1913.
- Hot water as an insecticide**
Lafon, Fla. Grow., July 26, 1913, 15.
- House centipede**, *see* **Scutigera forceps**
- House cricket**, *see* **Gryllus domesticus**
- House flies**
Surface, Pa. D. A. Zoöl. I, 1, 38, 1911.
- House flies in Louisiana**
Newell & Rosenfeld, J. Ec. Ent. I, 155, 1908.
- House fly**, *see* **Musca domestica**
- Household fumigation**
Surface, Pa. D. A. Zoöl. IV, 3, 103, '06.
- Household insects**
Dean, C. Gentl., May 2, 1914, 902.
Felt, N. Y. St. Mus. B. 129, 1909.
Felt, N. Y. St. Mus. B. 136, 1910.
Felt, N. Y. Dept. Agr. B. 42, 109, 1912.
Felt, Jr. Home Econ., Feb. 1912, 16.
Hutt, Prog. Farm., Aug. 2, 1913, 842.
Smith, N. J. B. 203, 1907.
Stevens, Prog. Farm., Mar. 26, '10, 278.
Surface, Pa. D. A. Zoöl. V, 12, 386, '08.
Surface, Pa. D. A. Zoöl. I, 1, 38, '11.
Surface, Pa. D. A. Zoöl. I, 5, 207, 1911.
Surface, Pa. D. A. Zoöl. III, 3, 82, 1905.
Van Rensseler, Prai. Farm., Jan., 1, Jan. 8, Jan. 15, Jan. 22, May 25, 1905, 13.
Walden, Conn. Farm., Mar. 16, '12, 7.
- House mosquito**, *see* **Culex pipiens**
- Howardia biclavus**
Carnes, Cal. Hort. Comm. Bien. R. 2, 198, 1907.
- Howard's scale**, *see* **Aspidiotus howardi**
- Hulstea undulatella**
Titus, U. S. B. 54, 34, 1905.
- Human flea**, *see* **Pulex irritans**

- Hunterellus hookeri**
 Hooker, Bishopp & Wood, U. S. B. 106, 165, 1912.
 Wood, J. Ec. Ent. IV, 425, 1911.
- Huntsman's Phosphorous Paste**
 ——— U. S. D. A. Ins. & Fung. Bd. Ins. 5, p. 78, 1914.
- Hyadaphis pastinacae**
 Essig, Cal. Hort. B. II, 1-2, 85, 1913.
- Hyalopterus arundinis**
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 85, 1913.
 Essig, Cal., Hort. B. II, 1-2, 86, 1913.
 Gillette & Taylor, Colo. B. 134, 13, '08.
 Gillette & Taylor, Colo. Fr. Grow., Apr. 1909, 13.
 Gillette & Taylor, Better Fr., Apr. 1909, 18.
 O'Kane, Inj. Ins. 321, 1914.
 Patch, Me. B. 187, 23, 1911.
 Popenoe, Kans. Farm., June 14, 1906, 641.
 Sanderson, Ins. Pests, 662, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 258, 1914.
- Hydnocera humeralis var. cyanescens**
 Felt, N. Y. St. Mus. Mem. 8, 693, 1906.
- Hydnocera pallipennis**
 Felt, N. Y. St. Mus. Mem. 8, 693, 1906.
 Hunter & Pierce, U. S. B. 114, 138, 1912.
 Pierce, U. S. B. 100, 68, 1912.
- Hydnocera pubescens**
 Hunter & Pierce, U. S. B. 114, 138, '12.
 Pierce, U. S. B. 73, 30, 41, 1908.
 Pierce, U. S. B. 100, 68, 1912.
- Hydnocera verticalis**
 Felt, N. Y. St. Mus. Mem. 8, 605, 1906.
- Hydrated lime**
 Taft, Mich. Hort. Soc. 910, 123, 1911.
 ——— Mich. Sp. B. 51, 438, 1910.
- Hydria undulata**
 Bailey, Vt. Agr. R. 6, 43, 1914.
 Felt, N. Y. St. Mus. Mem. 8, 551, 1906.
- Hydrocyanic-acid gas**
 Bethune, Ont. Agr. Coll. R. 33, 58, 08.
 Braun, Rur. Calif., Feb. 1912, 44.
 Britton, Conn. R. 7, 280, 1908.
 Britton, J. Ec. Ent. I, 111, 1908.
 Burgess, Ohio Nurs. Orch. Insp. B. 6, 5, 1905.
 Coleman, J. Ec. Ent. IV, 528, 1911.
 Cordley, Oreg. B. 108, 12, 1910.
- Garman, Ky. B. 147, 20, 1910.
 Goodwin, Ohio B. 234, 174, 1912.
 Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 22, 1907.
 Hinds, J. Ec. Ent. II, 214, 1909.
 Howard, U. S. R. Ent., 1908, 33.
 Howard, U. S. R. Ent., 1909, 32.
 Howard, U. S. R. Ent., 1910, 32.
 Howard & Popenoe, U. S. C. 163, 1912.
 Jarvis, Conn. Storrs B. 56, 231, 1909.
 Morris & Parker, Mont. C. 36, 251, '14.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 129, 1909.
 O'Kane, Inj. Ins. 82, 1914.
 Rosenau, Prevent. Med. 194, 1913.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 479, 1910.
 Stone & Fernald, Mass. B. 123, 12, '08.
 Symons, J. Ec. Ent. II, 169, 1909.
 Washburn, Minn. Ent. R. 11, 64, 1906.
 Walden, Conn. R. 6, 291, 1907.
 Walden, Conn. R. 9, 365, 1910.
 Whitmarsh, Ohio B. 253, 149, 1912.
 Woglum, U. S. B. 79, 1909.
 Woglum, U. S. B. 90, 1912.
 Yothers, J. Ec. Ent. III. 317, 1910.
 ——— Cal. Fr. Grow., Oct. 30, 1909, 5.
 ——— Rur. Cal., May 1907, 179.
 ——— Rur. Cal., July 1907, 256.
 ——— Rur. Cal., Aug. 1907, 287.
 ——— Rur. Cal., Mar. 1908, 98.
 ——— Rur. Cal., Apr. 1908, 169.
- Hydrocyanic-acid gas and Aleyrodes citri**
 ——— Rur. Cal., Apr. 1909, 118.
- Hydrocyanic-acid gas, chemistry of**
 McDonnell, U. S. B. 90, 91, 1912.
- Hydrocyanic-acid gas, for houses**
 Felt, N. Y. St. Mus. B. 129, 42, 1909.
 Felt, N. Y. St. Mus. B. 136, 48, 1912.
 Phillips, U. S. B. 52, 95, 1905.
- Hydroecia immanis**
 O'Kane, Inj. Ins. 136, 1914.
 Sanderson, Ins. Pests, 273, 1912.
- Hydroecia nitela, see Papaipema**
- Hylastes, see Hylastinus**
- Hylastinus obscurus**
 Dean, Kans. Agr. Educ. I, 4, 71, 1909.
 Fletcher, Can. Exp. Farms B. 52, 29, '05.
 Folsom, Ill. B. 134, 164, 1909.
 Folsom, Ill. Ent. R. 25, 92, 1909.
 Garman, Ky. B. 125, 48, 1906.
 Gibson, Ont. Ent. Soc. R. 41, 12, 1911.

- Gibson, Ont. Ent. Soc. R. 43, 13, 1913.
 Gossard, Ohio B. 233, 79, 1911.
 Lochhead, Syn. Ec. Ent. 82, 1914.
 Mills, Mich. Farm., Oct. 6, 1906, v. 50,
 p. 252.
 O'Kane, Inj. Ins. 116, 1914.
 Pettit, Mich. B. 258, 279, 1910.
 Sanderson, Ins. Pests, 200, 1912.
 Surface, Pa. D. A. Zoöl. II, 5, 186, 1912.
 Swaine, Ont. Ent. Soc. R. 41, 97, 1911.
 Troop, Farm. Guide, May 27, 1911, 13.
 Webster, U. S. C. 67, 1, 1905.
 Webster, U. S. Y. B., 1908, 378.
 Webster, U. S. C. 119, 1, 1910.
 Westgate & Hillman, U. S. F. B. 455, 37,
 1911.
 ——— Prai. Farm., LXXVIII, 114, '06.
 ——— U. S. Y. B., 1905, 635.
 ——— U. S. Y. B., 1908, 569.
- Hylastinus trifolii**, *see* **H. obscurus**
- Hylesinus aculeatus**
 Felt, N. Y. St. Mus. Mem. 8, 288, 1905.
- Hylesinus glabratus**
 Felt, N. Y. St. Mus. Mem. 8, 665, 1906.
- Hylesinus granulatus**
 Burke, Pr. Ent. Soc. Wash. VII, 89, '05.
- Hylesinus opaculus**
 Felt, N. Y. St. Mus. Mem. 8, 288, 1905.
 Johannsen, Me. B. 207, 463, 1912.
 Swenk, Nebr. Hort. Soc., 1909, 92.
- Hylesinus trifolii**, *see* **Hylastinus obscurus**
- Hylobius pales**
 Felt, N. Y. St. Mus. Mem. 8, 664, 1906.
 Hinds, Ala. Poly. B. 146, 101, 1909.
- Hylotoma macleayi**
 Felt, N. Y. St. Mus. Mem. 8, 549, 1906.
- Hylotoma pectoralis**
 Felt, N. Y. St. Mus. Mem. 8, 570, 1906.
 Schwarz, Pr. Ent. Soc. Wash. XI, 106,
 1909.
- Hylotoma scapularis**
 Felt, N. Y. St. Mus. Mem. 8, 542, 1906.
- Hylotrupes amethystinus**
 Webb, U. S. Y. B., 1910, 352.
- Hylotrupes bajulus**
 Felt, N. Y. St. Mus. Mem. 8, 664, 1906.
- Hylotrupes ligneus**
 Felt, N. Y. St. Mus. Mem. 8, 675, 1906.
 Webb, U. S. Y. B., 1910, 351.
- Hylurgops**, *see* **Hylesinus**
- Hymencyrtus crawii**
 Isaac, Bug. vs. Bug, 19, 1906.
- Hymenia fascialis**
 Chittenden, U. S. B. 127, 9, 1913.
 Marsh, U. S. B. 109, 1, 1911.
- Hymenia perspectalis**
 Chittenden, U. S. B. 127, 1, 1913.
 Davis, Ill. Ent. R. 27, 103, 1912.
- Hymenopterous parasites, methods of handling**
 Holloway, J. Ec. Ent. VI, 341, 1913.
- Hyparpax aurora**
 Felt, N. Y. St. Mus. Mem. 8, 520, 1906.
- Hypena humuli**
 Douglass, Ind. Ent. R. 2, 49, 52, 1910.
 O'Kane, Inj. Ins. 179, 1914.
 Sanderson, Ins. Pests, 279, 1912.
- Hypera punctata**
 Parks, J. Ec. Ent. VII, 297, 1914.
- Hyperallus caliroae**
 Cushman, U. S. B. 97, 101, 1911.
- Hyperaspidis sp.**
 Quaintance & Sasser, U. S. C. 121, 9,
 1910.
- Hyperaspis bigeminata**
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 35,
 1906.
- Hyperaspis binotata**
 Britton, Conn. B. 181, 8, 1914.
 Felt, N. Y. St. Mus. Mem. 8, 605, 1906.
 Forbes, Ill. B. 112, 358, 1907.
 Forbes, Ill. Ent. R. 24, 115, 1908.
 Sanders, U. S. C. 64, 3, 1905.
- Hyperaspis dissoluta**
 Essig, Cal. Hort. B. II, 1-2, 216, 1913.
- Hyperaspis fimbriolata**
 Britton, Conn. B. 181, 8, 1914.
- Hyperaspis lateralis**
 Essig, Pom. Jr. Ent. III, 519, 1911.
 Essig, Cal. Hort. B. II, 1-2, 215, 1913.
 Essig, Cal. Hort. B. III, 3, 130, 1914.
 Isaac, Bug vs. Bug, 14, 1906.
- Hyperaspis moerens**
 Essig, Cal. Hort. B. II, 1-2, 217, 1913.
- Hyperaspis signata**
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 35,
 1906.
 Dickerson, U. S. B. 67, 49, 1907.
 Howard, U. S. R. Ent., 1905, 292.
 Howard, U. S. R. Ent., 1906, 24.
 Sanders, U. S. C. 64, 3, 1905.
 Smith, N. J. R., 1905, 596.
 Smith, N. J. R., 1906, 570.
 ——— U. S. Y. B., 1905, 635.

- Hyperaspis spiculinita**
Essig, Cal. Hort. B. II, 1-2, 217, 1913.
- Hyperaspis spp.**
Johnson, Colo. B. 116, 10, 1906.
- Hyperaspis undulata**
Essig, Cal. Hort. B. II, 1-2, 215, 1913.
Webster, U. S. C. 93, 5, 1907.
Webster, U. S. C. 93, Rev. 6, 1909.
- Hyperchiria io**, *see* *Automeris*
- Hyperplatys maculatus**
Felt, N. Y. St. Mus. Mem. 8, 432, 1906.
- Hyphantria cunea**
Baldwin, Ind. Ent. R. 5, 66, 1912.
Barre & Conradi, S. C. B. 141, 23, 45, 1909.
Berger, U. S. B. 60, 41, 1906.
Bethune, Ont. Ent. Soc. R. 36, 13, 1906.
Bethune, Ont. Agr. Coll. B. 158, 7, 1907.
Brittain, Pr. Ent. Soc. B. C., 4, 15, 1914.
Britton, Conn. R. 4, 213, 1905.
Britton, U. S. B. 52, 42, 1905.
Buckley, Me. Dept. Agr. B. vol. X, 3, 3, 1911.
Chittenden, Nut Grow., Feb., 1906, 117.
Cotton, Ohio Nurs. Orch. Insp. B. 7, 41, 1906.
Davis, J. Ec. Ent. III, 185, 1910.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 21, 1913.
Douglass, Ind. Ent. R. 1, 132, 1908.
Douglass, Ind. Ent. R. 3, 118, 1910.
Douglass, Ind. Ent. R. 4, 120, 1912.
Ehrhorn, Cal. Fr. Grow., Dec. 12, '08, 13.
Ehrhorn, Pac. Rur. Press, LXXVI, 388, 1908.
Essig, Cal. Hort. B. II, 1-2, 189, 1913.
Felt, N. Y. R. 20, 405, 1905.
Felt, Gard. Mag., Aug. 1905, 39.
Felt, N. Y. St. Mus. Mem. 8, 142, '05.
Felt, N. Y. R. 21, 95, 1906.
Felt, U. S. B. 60, 90, 1906.
Felt, N. Y. Fr. Grow. Assoc., 1906, 120.
Felt, N. Y. R. 22, 57, 1907.
Felt, N. Y. R. 24, 50, 1909.
Fernald, Mass. B. 125, 54, 1908.
Forbes, Ill. B. 151, 466, 1911.
Forbes, Ill. Ent. R. 26, 4, 1911.
Fulton, Wright & Gregg, Pa. B. 110, 15, 1911.
Funk, Pa. Dept. Agr. B. 152, 222, '07.
Garcia, N. Mex. B. 68, 43, 1908.
Garman, Ky. B. 133, 38, 1908.
Gibson, Ont. Ent. Soc. R. 39, 118, '09.
Gibson, Ont. Ent. Soc. R. 40, 14, '10.
Gibson, Ont. Ent. Soc. R. 41, 13, 1911.
Gillette, Colo. B. 114, 7, 1906.
Gillette, Better Fr., Feb. 1910, 16.
Girault, Ent. News, 1913, 61.
Gossard, Fla. B. 79, 302, 1905.
Gossard, Ohio B. 164, 15, 1905.
Gossard, Ohio B. 233, 94, 1911.
Haseman, Mo. Hort. Soc., 1911, 241.
Hewitt, Ont. Ent. Soc. R. 41, 29, 1911.
Hitchings, Me. Ent. R. 5, 13, 1910.
Houser, Ohio B. 194, 185, 1908.
Jarvis, Conn. Storrs B. 56, 249, 1909.
Johannsen, Me. B. 177, 22, 1910.
Johannsen, Me. B. 187, 2, 1911.
Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 360.
Johannsen & Patch, Me. B. 195, 241, '11.
Lamson, Conn. Storrs B. 71, 74, 1912.
Lochhead, Ont. Ent. Soc. R. 36, 137, '06.
Lochhead, Syn. Ec. Ent. 66, 1914.
Moore, Wis. B. 190, 14, 1910.
Newell & Smith, U. S. B. 52, 70, 1905.
O'Kane, Inj. Ins. 296, 1914.
Ormsbee, Amer. Cult., June 29, '12, 10.
Osborn, U. S. B. 52, 50, 1905.
Patch, Me. B. 108, 163, 1905.
Popenoe, Kans. Farm., July 27, '05, 769.
Popenoe, Prai. Farm., Aug. 3, '05, 4.
Popenoe Kans. Farm., July 26, 1906, 783.
Rumsey, W. Va. Hort. Soc. 14th R., 29, 1907.
Rumsey & Brooks, W. Va. R. f. 1905-1906, 21.
Rumsey & Brooks, W. Va. R. f. 1907-1908, 19.
Rumsey & Brooks, W. Va. B. 116, 236, 1908.
Sanderson, U. S. B. 60, 75, 1906.
Sanderson, N. H. R. 17-18, 319, 1906.
Sanderson, Ins. Pests, 553, 1912.
Scott & Siegler, U. S. B. 116, 81, 1913.
Sherman, N. C. Dept. Agr. B. 29, 6, 51, 1908.
Slingerland & Crosby, Man. Fr. Ins. 107, 1914.
Smith, N. J. B. 181, 37, 1905.
Smith, U. S. B. 67, 104, 1907.
Smith, Nebr. Ins. Pest Bur. C. 5, 1, '08.
Smith, N. C. B. 206, 69, 1910.

- Somes, Mo. Fr. Exp. Sta. Bien. R. 1913-1914, 9.
- Stene, R. I. Bd. Agr. R. 21, 62, 1906.
- Stene, R. I. Nurs. Insp. 46, 1906.
- Stene, R. I. Bd. Agr. R. 25, 148, 1910.
- Surface, Pa. D. A. Zoöl. III, 4, 119, '05.
- Swenk, Nebr. Hort. Soc., 1909, 92.
- Symons, Md. B. 101, 138, 1905.
- Symons & Gahan, Md. Hort. Soc., 1904, 36, 1905.
- Tothill, Ent. Soc. Ont. R. 43, 57, 1913.
- Treherne, Pr. Ent. Soc. B. C., 4, 21, '14.
- Venables, Pr. Ent. Soc. B. C. 2, 11, '12.
- Washburn, Minn. P. B. 28, 1907.
- Washburn, Minn. R. 12, 106, 1908.
- Williams, Ala. Poly. B. 155, 49, 565, '11.
- Wilson, Pr. Ent. Soc. B. C. 2, 6, '12.
- Worsham, Ga. Bd. Ent. B. 33, 119, '10.
- Worsham, Ga. Hort. Soc., 1910, 119.
- Can. Hort. XXXVI, 263, 1913.
- U. S. Y. B., 1906, 514.
- U. S. Y. B., 1907, 550.
- U. S. Y. B., 1908, 577.
- Hyphantria textor**, *see* **H. cunea**
- Hypoclopus mortipenellus**
- Forbes, Ill. Ent. R. 23, 44, 95, 1905.
- Hypoderma**
- Gilbert, Archiv. Intern. Med., Oct. 1909, 226.
- Haase, Jr. Cutan. Dis. Aug. 1910, 395.
- Hutchins, Jr. Cutan. Dis., Nov. '08, 520.
- Miller, Jr. Amer. Med. Assoc. IV, 1978, 1910.
- Spoor, Jr. Amer. Med. Assoc. XLIX, 1775, 1907.
- Hypoderma bovis**
- Canning, Farm & Dairy, Can., Mar. 26, 1914, 19.
- Hadwen, Can. Dept. Agr. Anim. Br. B. 16, 7, 1912.
- Hadwen, Pr. Ent. Soc. B. C. 2, 81, '12.
- Hewitt, Can. Ent., 1914, 1.
- Hypoderma lineata**
- Bentley, Tenn. Bd. Ent. R. f., '13, 24.
- Broyles, Farm. Guide, May 24, '13, 17.
- Bruner, Iowa Home., June 15, 1905, p. 957.
- Crosby, Rur. N. Y., 1909, 562.
- Dacy, C. Gentl., Mar. 10, 1913, 741.
- Dalrymple, Amer. Vet. Rev. XLII, 546, 1913.
- Felt, N. Y. Farm. 7, Dec. 1905, 4.
- Fraser, C. Gentl., Apr. 11, 1914, 757.
- Frederick, Deseret Farm., Feb. 18, '11, 2.
- Gossard, O. Farm., May 15, 1909, 605.
- Gossard, Ohio P. B. 352, 1913.
- Gossard, Ohio P. B. 353, 1913.
- Hadwen, Can. Dept. Agr. Anim. Br. B. 16, 1912.
- Halbert, Tex. Stockm. Farm., Oct. 22, 1913, 6.
- Halbert, Tex. Stockm. Farm., Nov. 19, 1913, 2.
- Herms, Cal. Cult. XXXIV, 138, 1910.
- Herms, Cal. Cult. XLI, 263, 1913.
- Herrick, Tex. Stockm. Farm., May 12, 1909, 1.
- Hewitt, Farm & Dairy, Can. June 8, 1911, 10.
- Hyatt, O. Farm., Nov. 2, 1912, p. 421.
- Johannsen & Patch, Me. B. 195, 237, '11.
- Johnson, Farm. Guide, Feb. 27, '09, 7.
- Kaupp, Anim. Parasites, 30, 1908.
- Kaupp, Farm. Guide, July 30, 1910, 9.
- Law, U. S. B. An. I. R., 1907, 453.
- LeGear, Tex. Stockm. Farm., June 2, 1909, 2.
- Lochhead, Syn. Ec. Ent. 88, 1914.
- Lockwood, Farm & Ranch, Mar. 28, 1914, 21.
- Mayo, Kans. B. 136, 159, 1906.
- Miller, Jr. Amer. Med. Assoc. LV, 1978, 1910.
- Mote, O. Farm., Feb. 14, 1914, p. 202.
- Nash, Farm., World, Can., 1908, 121.
- O'Kane, Inj. Ins. 372, 1914.
- Overstreet, Tex. Stockm. Farm., Apr. 21, 1909, 13.
- Ransom, U. S. Y. B., 1905, 144.
- Ransom, U. S. B. An. I. R. 1908, 500.
- Rothe, Tex. Stockm. Farm., Apr. 21, 1909, 13.
- Rudell, Jr. Amer. Med. Assoc. LXI, 247, 1913.
- Surface, Pa. D. A. Zoöl. III, 1, 15, 1913.
- Tucker, Kans. Farm., May 17, '06, 532.
- Washburn, Minn. P. B. 22, 6, 1905.
- Washburn, Minn. R. 10, 134, 1905.
- Farm. Advocate, Can., Aug. 19, 1908, 129.
- Farm. Guide, May 1, 1909, 7.
- Nebr. Bd. Agr. Ann. R. f. 1908, 327.
- U. S. Y. B., 1907, 552.

Hypoderma sp.

- Howard, Minn. R. 15, 61, 1914.
 Lopton, Va. Med. Semi-Monthly, May
 24, 1912, 85.
 Miller, Jr. Amer. Med. Assoc. IV, 1978,
 1910.

Hyponomeuta malinella

- Felt, J. Ec. Ent. III, 341, 1910.
 Parrott, J. Ec. Ent. III, 158, 1910.

Hyponomeuta multipunctella

- Parrott, J. Ec. Ent. III, 159, 1910.

Hyponomeuta padella

- Parrott, J. Ec. Ent. II, 305, 1909.
 Parrott, J. Ec. Ent. III, 157, 1910.
 Shaw, Ohio Bd. Agr. R. 65, 1910, 544.

Hypophloeus cavus

- Felt, N. Y. St. Mus. Mem. 8, 504, 1906.

Hypothenemus tabacum

- Burgess, Ohio Nurs. Orch. Insp. R. 4,
 14, 1906.
 Burgess, U. S. B. 60, 72, 1906.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 51,
 1906.

Hypostena variabilis

- Quaintance, U. S. Y. B., 1907, 443.
 Washburn, J. Ec. Ent. III, 168, 1910.
 Webster, U. S. B. 85, 11, 1911.

Hypothenemus sp.

- Tucker, Can. Ent., 1911, 27.

Hypselonotus fulvus

- Morrill, U. S. B. 86, 91, 1910.

Hypsopygia costalis

- Abraham, Farm. Guide, Mar. 7, '14, 9.
 Bethune, Ont. Ent. Soc. R. 39, 135, '09.
 Dean, Kans. Farm., Jan. 9, 1908, 33.
 Dean, Kans. Agr. Educ. I, 4, 81, 1909.
 Folsom, Ill. B. 134, 168, 1909.
 Folsom, Ill. Ent. R. 25, 96, 1909.
 Garman, Ky. B. 125, 45, 1906.
 Gossard, Ohio B. 233, 79, 1911.
 Headlee, Kans. B. 155, 340, 1908.
 O'Kane, Inj. Ins. 186, 1914.
 Pettit, Mich. Farm. May 11, 1907, v.
 51, p. 506.
 Pettit, Mich. B. 258, 289, 1910.
 Popenoe, Kans. Farm., June 14, '06, 629.
 Sanderson, Ins. Pests, 219, 1912.
 Surface, Pa. D. A. Zoöl. III, 1, 7, 1913.
 Swenk, Nebr. Bd. Agr. R. f. 1908, 301.
 Swenk, Nebr. Ins. Pest. Bur., C. 2, 1,
 1908.
 Swenk, Nebr. Bd. Agr. R. f. 1910, 367.

Swenk, Nebr. Ent. B. 1, 94, 1913.

Westgate & Hillman, U. S. F. B. 455,
 39, 1911.

Ibalia maculipennis

Felt, N. Y. St. Mus. Mem. 8, 499, 1906.

Ice on scales

Parrott, N. Y. Fr. Grow. Assoc., '13, 49.

Icerya purchasi

- Barre & Conradi, S. C. B. 141, 41, 1909.
 Burgess & Collins, U. S. Y. B., '11, 461.
 Carnes, Cal. Hort. B. I, 5, 197, 1912.
 Coit, Ariz. B. 58, 318, 1908.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1,
 111, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2,
 224, 1907.
 Essig, Pom. Jr. Ent. I, 13, 1909.
 Essig, Cal. Hort. B. II, 1-2, 89, 1913.
 Newell & Rosenfeld, La. Crop Pest
 Comm. C. 12, 6, 1907.
 Quayle, Cal. B. 214, 469, 1911.
 Quayle, J. Ec. Ent. IV, 513, 1911.
 Quayle, U. S. D. A. B. 134, 20, 1914.
 Rosenfeld, La. Hort. Soc., 1907, 28.
 Sellards, Fla. R., 1905, 27.
 Sellards, Fla. R., 1906, xvii.
 Smith, U. S. B. 52, 75, 1905.
 Tucker, La. B. 145, 2, 1914.
 Watson, Fla. Fr. Grow., Mar. 6, '12, 9.
 Watson, Fla. R., 1912, lv, lxii.
 Watson, Fla. R., 1913, lxiv.
 Woglum, U. S. B. 90, 1, 1912.

Icerya purchasi crawii

Carnes, Cal. Hort. Comm. Bien. R. 2,
 164, 1907.

Icerya purchasi maskelli

Carnes, Cal. Hort. Comm. Bien. R. 2,
 164, 1907.

Ichneumon disparis

Howard & Fiske, U. S. B. 91, 239, '11.

Ichneumon extrematis

Chittenden, U. S. B. 125, 10, 1913.

Ichneumon longulus

Johnson, Colo. B. 98, 21, 1905.

Ichneumon orpheus

Washburn, J. Ec. Ent. III, 168, 1910.

Ichneumon sublatius

Patch, Me. B. 161, 340, 1908.
 Patch, Me. B. 162, 365, 1908.

Ichthyura, see Melalopha

Idaho cricket, see *Anabrus simplex*

- Idiopterus nephrolepidis**
Davis, Ill. Ent. R. 27, 118, 1912.
- Imbricated snout-beetle**, *see* **Epicaerus imbricatus**
- Imperial moth**, *see* **Basilona imperialis**
- Imported cabbage leaf-miner**, *see* **Scaptomyza graminum**
- Imported cabbage webworm**, *see* **Hellula undalis**
- Imported cabbage-worm**, *see* **Pontia rapae**
- Imported currant-borer**, *see* **Sesia tipuliformis**
- Imported currant worm**, *see* **Pteronux ribesii**
- Imported elm leaf-beetle**, *see* **Galerucella luteola**
- Imported grape root-worm**, *see* **Adoxus vitis**
- Imported onion maggot**, *see* **Pegomya ceparum**
- Imported pea-moth**, *see* **Semasia nigricana**
- Incurvaria acerfoliella**
Felt, N. Y. St. Mus. Mem. 8, 541, '06.
Felt, N. Y. R. 27, 56, 1912.
Gibson, Ont. Ent. Soc. R. 42, 14, '12.
Jarvis, Ont. Ent. Soc. R. 37, 54, '07.
- Inland lime sulphur spray**
—— U. S. D. A. Ins. & Fung. No. 111, 1913.
- Indian euphoria**, *see* **Euphoria inda**
- Indian fruit-fly**, *see* **Ceratitis capitata**
- Indian-meal moth**, *see* **Plodia interpunctella**
- Insect bites**
Dyer, N. Orl. Med. Surg. Jr. LVIII, 800, 1906.
Dyer, Ind. Med. Jr., July 1906, 11.
Pearse, Northw. Med. III, 81, 1911.
- Insect Catching Machine**
Bishopp, J. Ec. Ent. III, 314, 1910.
- Insect pests from Japan**, *list of*
Whitney, Cal. Hort. B. I, 10, 737, '12.
- Insect pests**, *periodicity of*
Isaac, Cal. Cult., XXVIII, 190, 1907.
- Insect powder**
—— U. S. D. A. Insecticide Decision 1, 1911.
- Insecticide industries in California**
Woodworth, J. Ec. Ent. V, 358, 1912.
- Insecticide laws**
Catheart, N. J. C. 11, 1912.
Cook, Cal. Hort. Comm. Statutes, 1912.
Fraps, Tex. B. 96, 4, 1907.
Fraps, Tex. B. 107, 5, 1908.
Fraps, Tex. B. 123, 5, 1909.
Minn. Ent. R. 13, 101, 1910.
Tenn. Dept. Agr. Bien. R. '09-'10, 43.
- Insecticides**
Alderman, Giddings & Rumsey, W. Va. C. 7, 38, 1913.
Ashby, Ala. Hort. Soc. Ann. R. 8, 100, 1911.
Ashby, Pr. Ala. Hort. Soc. 9, 143, 1911.
Baldwin, Ind. Ent. R. 5, 15, 1912.
Barre & Conradi, S. C. B. 141, 6, '09.
Bartlett, S. W. Stockm., Jan. 16, '14, 7.
Beach & Little, Iowa B. 89, 13, 1907.
Bentley, Tenn. B. v. XVIII, 4, 35, 1905.
Bentley, Tenn. Bd. Ent. R. f. 1913, 42.
Bentley, Tenn. B. 106, 125, 1914.
Bethune, Ont. Agr. Coll. B. 158, 34, '07.
Bethune, Ont. Agr. Coll. B. 171, 55, '09.
Buckley, Me. Dept. Agr. B. vol. X, 3, 14, 1911.
Burgess, Ohio Bd. Agr. R. 61, 878, '06.
Caesar, Ont. Agr. Coll. B. 193, 43, 1912.
Chandler, Mo. C. Inform. 34, 12, 1908.
Chandler, Mo. Hort. Soc., 1908, 321.
Chandler, Mo. Hort. Soc., 1909, 379.
Chandler, Mo. B. 102, 279, 1912.
Chittenden, Ins. Inj. Veg. 30, 1907.
Chittenden, Va. Truck Exp. Sta. B. 2, 46, 1909.
Conradi, S. C. B. 134, 9, 1908.
Cooper, Cal. Hort. Comm. Ins. & Ins. 5, 1905.
Cooley & Swingle, Mont. C. 17, 141, '12.
Cordley, Oreg. Bd. Hort. 8th Bien. R. 237.
Cordley, Oreg. Bd. Hort. 10th Bien. R. 70.
Cordley, Oreg. B. 108, 6, 1910.
Cordley & Jackson, Oreg. Cir. B. 13, 4.
Craneheld, Wis. Hort. Soc. R. f. '06, 303.
Davis, Ill. Ent. R. 26, 148, 1911.
Dean, Va. Agr. R. f. 1907, 106, 1908.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 130, 1913.
Dickens & Eastman, Kans. R. 20, 214, '07.
Douglass, Ind. Ent. R. 1, 27, 1908.
Douglass, Ind. Ent. R. 3, 222, 1910.
Essig, Pom. Jr. Ent. III, 617, 1911.
Essig, Ventura Co. (Cal.) Hort. Comm. B. 2, 1911.

Insecticides (Cont'd)

- Essig, Cal. Hort. B. II, 1-2, 297, 1913.
 Eustace & Pettit, Mich. Sp. B. 61, 345, 1913.
 Faurot, Mo. Fr. Exp. Sta. B. 23, 33, '12.
 Favor, Mo. C. Inform. 23, 9, 1906.
 Felt, Pr. N. Y. Fr. Grow. Assoc. 10 Meet., 36, 1911.
 Fernald, Mass. Bd. Agr. C. 2, 4, 1913.
 Fields, Okla. R. 15, 49, 1906.
 Fletcher, Can. Exp. Farms B. 52, 8, '05.
 Fulton, Wright & Gregg, Pa. B. 110, 4, 1911.
 Funk, Pa. Dept. Agr. B. 152, 307, 1907.
 Garcia, N. Mex. B. 68, 52, 1908.
 Garcia, N. Mex. B. 75, 38, 1910.
 Garman, Ky. B. 147, 12, 17, 18, 21, 23, 1910.
 Gillette, Sci. Amer. Suppl. LXII, 25543, 1906.
 Gillette, Colo. B. 114, 28, 1906.
 Gillette, J. Ec. Ent. III, 207, 1910.
 Gossard, Fla. Hort. Soc. Trans. f. 1905, 39.
 Gossard & Houser, Ohio C. 63, 7, 1906.
 Gray, Better Fr. Aug. 1914, 9.
 Green, Selby & Gossard, Ohio B. 199, 92, 1908.
 Green, Selby & Gossard, Ohio B. 232, 32, 1911.
 Harcourt, Ont. Agr. Coll. R. 30, 63, '05.
 Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 2, 1907.
 Herrick, Miss. B. 102, 4, 1907.
 Hewitt, Can. Exp. Farms Ent. B. 6, 23, 1912.
 Houghton, Del. B. 74, 1906.
 Houser, Ohio B. 169, 142, 1906.
 Houser, Ohio B. 194, 197, 1908.
 LeFevre, Pa. Dept. Agr. R. 11, 579, '05.
 LeFevre, Pa. Hort. Assoc. R. f. '06, 49.
 Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 31, 1906.
 Lovett, Okla. B. 92, 1911.
 Lovett, Oreg. Coll. B. 91, 30, 1913.
 Melander, Wash. B. 68, 11, 1905.
 Melander & Jenne, Wash. B. 77, 42, '06.
 McLin, Fla. Dept. Agr. Quart. B. 4, vol. 20, 34, 1910.
 McLin, Fla. Dept. Agr. Quart. B. 2, vol. 21, 99, 1911.
 Moore, Wis. B. 190, 33, 1910.
 Morris, Okla. B. 64, 16, 1905.
 Morris & Parker, Mont. C. 36, 207, '14.
 Munson, W. Va. R. f. 1909-1910, 90.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 122, 1909.
 Norton & Symons, Md. B. 115, 150, '07.
 O'Kane, Inj. Ins. 65, 1914.
 Parker, Mont. Hort. Soc., 1912, 79.
 Parker, Mont. Hort. Soc., 1913, 71.
 Parrott, N. Y. Fr. Grow. Assoc., '07, 89.
 Parrott, N. Y. Fr. Grow. Assoc., '10, 28.
 Parrott, N. Y. Fr. Grow. Assoc., '13, 48.
 Pettit, Mich. B. 233, 216, 1906.
 Price, Va. C. 7, 88, 1909.
 Quayle, Cal. C. 49, 1910.
 Quayle, Cal. C. 66, 1911.
 Rose, Fla. Dept. Agr. B. 1, vol. 15, 45, 1905.
 Rose, Fla. Dept. Agr. B. 1, vol. 17, 46, 1907.
 Rose, Fla. Dept. Agr. Quart. B. 1, vol. 18, 49, 1908.
 Rose, Fla. Dept. Agr. Quart. B. 1, vol. 19, 39, 1909.
 Rose, Fla. Comm. Agr. Bien. R. 11, 130, 1911.
 Ruggles & Stakman, Minn. B. 121, 6, 1911.
 Sanborn, Tex. B. 113, 8, 1908.
 Sanborn, Okla. B. 100, 6, 1912.
 Sanderson, N. H. Bd. Agr. R., 1905-1907, 168.
 Sanderson, Vt. Hort. Soc. 6th R. 25, '09.
 Sanderson, Ins. Pests, 42, 1912.
 Shaw, Ohio Nurs. Orch. Insp. B. 11, 13, 1910.
 Sherman, N. C. Dept. Agr. B. 30, 6, 5, 1909.
 Sherman, N. C. Dept. Agr. B. 32, no. 7, 40, 1911.
 Sherman, N. C. Dept. Agr. B. 33, 6, 29, 1912.
 Sherman, N. C. Dept. Agr. B. 34, 6, 20, 1913.
 Slingerland & Crosby, Man. Fr. Ins. 474, 1914.
 Smith, N. J. B. 181, 44, 1905.
 Smith, Ga. Bd. Ent. B. 19, 138, 1906.
 Smith, N. J. Bd. Agr. R. 34, 279, 1907.
 Smith, N. J. R. 213, 1908.
 Smith, Nebr. Hort. Soc. B. 20, 4, 1908.
 Smith, N. C. B. 197, 60, 1908.

Insecticides (*Cont'd*)

- Smith, Ins. Friends & En., 275, 1909.
 Starnes, Ga. P. B. 49, 1905.
 Stevens & Woglum, N. C. B. 193, 16, '06.
 Stuckey, South. Cult., June 15, '10, 22.
 Surface, Pa. D. A. Zoöl. IV, 1, 10, '06.
 Surface, Pa. D. A. Zoöl. V, 9, 294, '08.
 Surface, Pa. D. A. Zoöl. I, 1, 6, '11.
 Surface, Pa. D. A. Zoöl. II, 4, 162, '12.
 Swaine, Can. Exp. Farms Ent. C. 1, 13, 1913.
 Symons, Md. B. 101, 200, 1905.
 Symons Norton & Close, Md. B., 130, 88, 1908.
 Taft, Mich. Hort. Soc., 1910, 72, '11.
 Taft & Shaw, Mich. Sp. B. 45, 294, '08.
 Taft & Smith, Mich. Sp. B. 36, 269, '07.
 Troop, Ind. Hort. Soc. f. 1906, 118, '07.
 Troop & Woodbury, Ind. B. 118, 400, 1907.
 Walker, Ark. B. 95, 66, 1907.
 Washburn, Minn. Ent. R. 11, 52, '06.
 Washburn, Minn. R. 12, 72, 1908.
 Washburn, Minn. Ent. R. 13, 146, '10.
 Weiss, N. J. R., 1912, 444.
 Whiteside, Mont. Bd. Hort. f. 1905-6, 51, 1907.
 Whiteside, Mont. Bd. Hort. f. 1907-8, 59, 1909.
 Williams, Ala. Poly. Ins. B. 157, 660, 662, 1911.
 Wilson, Oreg. Cir. B. 14.
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 137.
 Yothers, Fla. Grow., Feb. 8, '13, 10.
 ——— Colo. R. Bd. Hort. f. 1909, 140.
 ——— Dept. of Parks, Brooklyn, N. Y., 1908, 3 pp.
 ——— Ill. Hort. Soc. f. 1907, 16.
 ——— Ill. Hort. Soc. f. 1908, 20.
 ——— Ill. Hort. Soc. f. 1909, 21.
 ——— Ill. Hort. Soc. f. 1910, 21.
 ——— Ill. Hort. Soc. f. 1911, 21.
 ——— Ill. Hort. Soc. f. 1912, 26.
 ——— Ill. Hort. Soc. f. 1913, 41.
 ——— Iowa Hort. Soc. f., 1904, 181, '05.
 ——— La. B. 112, 42, 1908.
 ——— Mich. Sp. B. 51, 435, 1910.
 ——— Mich. Sp. B. 54, 331, 1911.
 ——— Mich. Sp. B. 57, 510, 1912.
 ——— Minn. Hort. Soc., 1905, 153.
 ——— Minn. Hort. Soc., 1912, 172.
 ——— Mont. Bd. Hort. f. 1903-4, 104, 1905.
 ——— Nebr. Insect Pest & Plant Disease Bur. B. 1, 5, 1908.
 ——— Oreg. Bd. Hort. 8th Bien. R. 58.
 ——— S. W. Stockm., Mar. 14, 1913, 11.
 ——— Tenn. Dept. Agr. Bien. R., 1905-1906, 188.
 ——— Utah, Bd. Hort. Bien. R. f., 1905-1906, 55, 1907.
 ——— Utah, Hort. Comm. Bien. R. f., 1909-1910, 41, 1911.
 ——— Va. Agr. R. f. 1907, 122, 1908.
 ——— Va. Agr. R. f. 1910, 97, 1910.
 ——— Wis. Hort. Soc. R. f. 1910, xix.
 ——— Wis. Hort. Soc. R. f. 1912, xix.
 ——— Wis. Hort. Soc. R. f. 1913, xvii.
 ——— Wis. Hort. Soc. R. f. 1914, xxiii.
 ——— Wyo. Bd. Hort. 1st Bien. R. 54, 1905-1906.
- Insecticides, action**
 Schafer, Mich. Tech. B. 11, 537, '12.
 Shafer, J. Ec. Ent. IV, 47, 1911.
- Insecticides, analysis of**
 Bradley, Oreg. B. 107, 12, 1910.
 Smith, N. J. R., 1910, 359.
 Van Slyke, Pr. West. N. Y. Hort. Soc. 57 Meet., 125, 1913.
 ——— N. Y. St. B. 348, 85, 1912.
 ——— N. Y. St. B. 384, 283, 1914.
- Insecticides, gaseous and volatile**
 Menges, Pa. Dept. Agr. R. 14, 359, '08.
- Insecticides, injury by**
 Ashby, Minn. Hort. Soc., 1912, 225.
- Insecticides, misbranding**
 S. W. Stockm., Jan. 30, 1914, 10.
 ——— S. W. Stockm., Feb. 13, 1914, 11.
- Insecticides, pure**
 Bruner, Nebr. Farm., Dec. 15, '09, 1095.
 Woodworth, Cal. C. 73, 1911.
- Insectonosis**
 ——— U. S. D. A. Ins. Fung. No. 71, '13.
- Insects and disease**
 Albert, Iowa Med. Jr., Sept. 15, '05, 369.
 Albert, N. Y. Med. Jr., Feb. 11, '05, 220.
 Bergey, N. Y. Med. Jr., June 15, '07, 1120.
 Brady, N. Orl. Med. Surg. Jr., LXI, 520, 1909.
 Brain, Tex. Bd. Health B. VII, 3, 3, 1913.
 Brown, Intern. Clinics, IV, 200, 1909.

Insects and disease (*Cont'd*)

- Brues & Sheppard, J. Ec. Ent. V, 305, 1912.
 Buttles, Vt. Med. Monthly XIX, 60, '13.
 Collins, Va. Med. Semi-Monthly XIII, 385, 1909.
 Dixon, Penna. Health Bull. 32, 1912.
 Doane, Insects & Disease, 1910.
 Gerhard, Ent. News, 1908, 84.
 Hendren, Ky. Med. Jr. XII, 8, 1914.
 Herms, Cal. Fr. Grow., Dec. 18, '09, 10.
 Herms, J. Ec. Ent. II, 265, 1909.
 Huber, N. Y. St. Jr. Med. VIII, 580, '08.
 Hunter, J. Ec. Ent. VI, 27, 1913.
 Knab, J. Ec. Ent. V, 196, 1912.
 Langfeld Trained Nurse, XXXV, 195, 1906.
 Ludlow, Milit. Surg., XXXI, 72, 1912.
 Ludlow, South. Med. Jr. V, 488, 1912.
 McCaw, Old Dom. Jr. Med. Surg. XIII, 1, 1911.
 Rea, Atlanta Jr. Rec. Med. XII, 368, 1909.
 Rucker, Sci. Amer. CVII, 24, 1912.
 Skinner, Penna. Med. Jr. XV, 952, '12.
 Smith, Penna. Med. Jr. XIII, 695, 1910.
 Sneed, Va. Med. Semi-Monthly, XVIII, 122, 1914.
 Wellman, Pr. Path. Soc. Phila., XII, 36, 1909.
 Wherry, Cal. St. Jr. Med. V, 281, 1907.
 Winne, Albany Med. Ann. XXXIV, 573, 1914.
 Woodworth, Science, XXVII, 227, '08.

Insects and leprosy

- Ashmead, Pac. Med. Jr., Dec., '07, 767.

Insects and moisture

- Headlee, J. Ec. Ent. VII, 413, 1914.

Insects and pellagra

- Jennings & King, Trans. Nat'l Assoc. Study Pellagra, II, 51, 1912.
 Jennings & King, Amer. Jr. Med. Sci., Sept. 1913, 411.

Insects and pellagra, see also Simulium and pellagra**Insects and surra**

- Mitzmain, Bull. 94, Publ. Health Hyg. Lab. 7, 1914.

Insects and temperature

- Headlee, J. Ec. Ent. VII, 413, 1914.
 Peairs, J. Ec. Ent. VII, 174, 1914.

Insects and weather

- Parrott, Pr. N. Y. Fr. Grow. Assoc., 10 Meet., 33, 1911.
 Sherman, Prog. Farm., May 30, '05, 4.
Insects, dissemination of spores by
 Burrill, Ill. B. 118, 574, 1907.
 Harter, U. S. F. B. 488, 7, 1912.
Insects, loss by
 Hewitt, Agr. Gaz. Can., Oct. 1914, 765.
 Slingerland, Pr. N. Y. Fr. Grow. Assoc., 6 Meet., 99, 1907.

Inspection

- Adams, Proc. Ark. Hort. Soc., 1909, 88.
 Atwood, N. Y. Fr. Grow. Assoc., '07, 76.
 Atwood, J. Ec. Ent. IV, 99, 1911.
 Atwood, N. Y. Dept. Agr. B. 39, 1475, 1912.
 Atwood, N. Y. Dept. Agr. B. 52, 3, '13.
 Bachelder, N. H. Bd. Agr. R., 1911-1912, ix.
 Baker, Claremont, (Cal.) Pom. Club B. 1, 3, 1909.
 Baldwin, Ind. Hort. Soc. f. '11, 120, '12.
 Bentley, Tenn. Bd. Ent. R. f., 1909, 5.
 Bentley, Tenn. R. f. 1910, 110.
 Bentley, Tenn. Bd. Ent. R. f. 1912, 11.
 Bentley, Tenn. Bd. Ent. R. f. 1913, 5.
 Bentley, Tenn. Bd. Ent. R. 8, 11, 1913.
 Binford, Ala. Hort. Soc. R. 7, 231, 1910.
 Bremner, Cal. Hort. Comm. Destr. Ins. 34, 1910.
 Britton, Conn. Ent. R. 7, 263, 1907.
 Britton, Conn. Ent. R. 8, 770, 1908.
 Brooks, W. Va. R. f. 1904-1905, 13.
 Brues, Wis. R. 22, 322, 1905.
 Burgess, Ohio Hort. Soc., 1904, 129.
 Burgess, Ohio Bd. Agr. R. 60, 601, '05.
 Burgess, Ohio, Nurs. Orch. Insp. R. 4, 5, 1906.
 Burgess, Ohio Bd. Agr. R. 61, 649, 951, 1906.
 Burgess, Ohio Hort. Soc., 1906, 52.
 Burgess, Ohio Nurs. Orch. Insp. R. 5, 9, 1907.
 Dean, Kans. Hort. Soc., 1912, 78.
 Dean, Kans. Hort. Soc., 1913, 180.
 Dixon, Tex. Agr. R. 1, 16, 1908.
 Dixon, Tex. Dept. Agr. B. 6, 5, 1908.
 Dixon, Tex. Agr. R. 5, 10, 1912.
 Dixon, Tex. Dept. Agr. B. 28, 10, 1912.
 Dixon, Tex. Agr. 6, 5, 1913.
 Dixon, Tex. Agr. 7, 5, 1914.

Inspection (*Cont'd*)

- Doten, Nev. C. 3, 1910.
 Doten, Nev. C. 5, 1910.
 Douglass, Ind. Bd. Agr. R. 56, 573, '07.
 Evans, Ohio Bd. Agr. R. 62, 591, 1907.
 Evans, Ohio Nurs. Orch. Insp. R. 6, 7, 1908.
 Fernald, Mass. Bd. Agr. R. 52, 243, '05.
 Fernald, Mass. Bd. Agr. R. 54, 207, 1907.
 Fernald, Mass. Bd. Agr. R. 55, 187, '08.
 Fernald, Mass. Bd. Agr. R. 57, 123, '10.
 Fernald, J. Ec. Ent. III, 272, 1910.
 Fernald, Mass. Bd. Agr. R. 59, 173, '12.
 Fernald, Mass. Bd. Agr. R. 60, 179, '13.
 Forbes, Ill. Hort. Soc. f. 1904, 108, 1905.
 Forbes, Ill. Hort. Soc. f. 1906, 124.
 Forbes, Ill. Hort. Soc. f. 1907, 196.
 Forbes, Ill. Hort. Soc. f. 1908, 63.
 Forbes, Ill. Hort. Soc. f. 1909, 93.
 Forbes, Ill. Hort. Soc. f. 1910, 90, 1911.
 Forbes, Ill. Hort. Soc. f. 1911, 74, 1912.
 Fox, Mont. Hort. Soc., 1912, 112.
 Gardner, Me. Comm. Agr. R. f. '11, 62.
 Gardner, Me. Comm. Agr. R., 1912, 69.
 Gardner, Me. Comm. Agr. R., 1913, 70, 1914.
 Garman, Ky. Hort. Soc., 1913, 47.
 Garman, Ky. Bur. Agr. Bien. R. 20, 194, 1914.
 Garman, Ky. Hort. Soc., 1914, 10.
 Gillette, Colo. Bd. Hort. R. f. 1905, 76, 1906.
 Gillette, Colo. Bd. Hort. R. f. 1911, 101, 1912.
 Gillette & List, Colo. C. 12, 3, 1913.
 Glenn, Ill. Hort. Soc. f. 1912, 43, 1913.
 Glenn, Ill. Hort. Soc. f. 1913, 178.
 Haseman, Mo. Hort. Soc., 1913, 441.
 Haseman, Mo. P. B. 49, 1914.
 Haseman, J. Ec. Ent. VII, 124, 1914.
 Hayhurst, Proc. Ark. Hort. Soc., '11, 49.
 Headlee, N. J. Bd. Agr. R. 40, 232, 1912.
 Headlee, N. J. Bd. Agr. R. 41, 227, '14.
 Hitchings, Me. Comm. Agr. R., 1906, 218, 1907.
 Hitchings, Me. Ent. R. 1, 20, 1906.
 Hitchings, Me. Ent. R. 2, 48, 1907.
 Hitchings, Me. Comm. Agr. R., 1908, 202, 1909.
 Hitchings, Me. Ent. R. 3, 57, 1908.
 Hitchings, Me. Ent. R. 4, 10, 1909.
 Hitchings, Me. Dept. Agr. B. vol. IX, 1, 20, 1910.
 Hitchings, Me. Ent. R. 5, 25, 1910.
 Hitchings, Me. Comm. Agr. R., 1910, 56, 1911.
 Hitchings, Me. Ent. R. 6, 14, 1911.
 Howard, Mo. Hort. Soc., 1909, 34.
 Huntley, Wash. Comm. Hort. 6th Bien. R., 9, 1909.
 Huntley, Wash. Hort. Assoc., 8th Ann. R. 99, 1912.
 Isaac, Pac. Rur. Press, LXXIV, 85, '07.
 Klaiber, Colo. C. 12, 21, 1913.
 Kone, Tex. Agr. R. 3, 4, 1910.
 Kone, Tex. Comm. Agr. R. 3, 4, 1910.
 Kone, Tex. Agr. R. 4, 4, 1912.
 Lyne, Pr. Ent. Soc. B. C. I, 26, 1911.
 McDonald, Pac. Rur. Press, LXXXII, 304, 1911.
 Merrill, Cal. Cult., XXXIX, 542, 1912.
 Mobley, Oreg. Bd. Hort. 9th Bien. R., 60.
 Moore, Wis. R. 23, 231, 1906.
 Morgan, Tenn. Bd. Ent. R. f. '05, 48.
 Morgan, Tenn. Bd. Ent. f. 1906, 63.
 Morgan, Tenn. Dept. Agr. Bien. R., 1907-1908, 21.
 Morgan, Tenn. Bd. Ent. R. f. '08, 6.
 Morrill, J. Ec. Ent. VI, 261, 1913.
 Morrill, S. W. Stockm., Oct. 24, 1913, 12.
 Morrill, Ariz. Comm. Agr. & Hort. R. 6, 9, 1914.
 Morrill, S. W. Stockm., Jan. 16, '14, 18.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 12, 1907.
 Phillips, Va. Crop Pest Comm. C., 1905.
 Phillips, Va. Hort. Soc., 13th R., 214, 1909.
 Platt, Mont. Hort. Soc., 1914, 94.
 Rosenfeld, La. Hort. Soc., 1907, 24.
 Rosenfeld, La. Hort. Soc., 1908, 101.
 Rosenfeld, J. Ec. Ent. II, 283, 1909.
 Rumsey, W. Va. R. f. 1904-1905, 8.
 Rumsey, W. Va. Hort. Soc. 16th R., 37, 1909.
 Rumsey, W. Va. R. f. 1911-1912, 59, 75.
 Rumsey & Brooks, W. Va. R. f. 1905-1906, 10.
 Rumsey & Brooks, W. Va. R. f. 1909-1910, 38.
 Russell, Wis. B. 218, 58, 1911.
 Sanders, Mich. Hort. Soc., '10, 82, '11.

Inspection (*Cont'd*)

- Sanders, Wis. B. 227, 3, 1912.
 Sanders, Wis. B. 228, 78, 1913.
 Sanders, J. Ec. Ent. VII, 102, 1914.
 Sanderson, N. H. Bd. Agr. R., 1905-1907, 287.
 Sasscer, J. Ec. Ent. VII, 240, 1914.
 Severin, S. D. Hort. Soc. 8th R., 149, '11.
 Shaw, Ohio Bd. Agr. R. 63, '08, 392, 684.
 Shaw, Ohio Bd. Agr. R. 64, 1909, 625.
 Shaw, Ohio Hort. Soc., 1909, 86.
 Shaw, J. Ec. Ent. III, 77, 1910.
 Shaw, Ohio Hort. Soc., 1910, 103.
 Shaw, Ohio Hort. Soc., 1912, 9.
 Shaw, Ohio Hort. Soc., 1913, 9.
 Sherman, N. C. Ent. C. 23, 1908.
 Sherman J. Ec. Ent. II, 382, 1909.
 Sherman, N. C. Dept. Agr. B., June 1909, 30.
 Sherman, N. C. Dept. Agr. B. June 1912, 44.
 Sherman & Woglum, N. C. Crop Pest Cir. 10, 1906.
 Smith, Ga. Bd. Ent. B. 20, 174, 1906.
 Smith, Ga. Ent. R. f. 1906, 4.
 Smith, N. J. Bd. Agr. R. 33, 101, 1906.
 Smith, N. J. Bd. Agr. R. 34, 291, 1907.
 Smith, N. J. Bd. Agr. R. 37, 45, 1910.
 Smith, N. J. Bd. Agr. R. 38, 54, 1911.
 Smith, N. J. Bd. Agr. R. 39, 195, 1911.
 Stark, Better Fr., Aug. 1913, 22.
 Stene, R. I. Bd. Agr. R. 20, 24, 1905.
 Stene, R. I. Bd. Agr. R. 22, 21, 1907.
 Stene, R. I. Bd. Agr. R. 23, 21, 1908.
 Stene, R. I. Bd. Agr. R. 24, 115, 1909.
 Stene, R. I. Bd. Agr. R. 25, 51, 1910.
 Stene, R. I. R. 1912, Ent. Dept. 3, '12.
 Stene, R. I. R. 1914, Ent. Dept. 35, '14.
 Stewart, W. Va. R. f. 1907-1908, 10.
 Surface, Pa. Dept. Agr. R. 11, 134, '05.
 Surface, Pa. Dept. Agr. R. 12, 143, '06.
 Surface, Pa. D. A. Zoöl. IV, 9, 308, 1906.
 Surface, Pa. D. A. Zoöl. V, 4, 100, 1907.
 Surface, Pa. Dept. Agr. R. 13, 152, 1907.
 Surface, Pa. D. A. Zoöl. V, 9, 276, 1908.
 Surface, Pa. Dept. Agr. R. 14, 131, 1908.
 Surface, Pa. Hort. Assoc., 50th Meet., 1909, 87, 98.
 Surface, Pa. D. A. Zoöl. VII, 3, 68, 1909.
 Surface, Pa. Dept. Agr. R. 16, 100, 1910.
 Surface, Pa. D. A. Zoöl. VII, 11-12, 335, 1910.
 Surface, Pa. Dept. Agr. R. 19, 87, 1913.
 Surface, J. Ec. Ent. VI, 265, 1913.
 Symons, Md. Hort. Soc., 1904, 74, 1905.
 Symons, Md. Hort. Soc., 1905, 64, 1906.
 Symons, Md. Hort. Soc., 1906, 146, '07.
 Symons, Md. Hort. Soc., 1907, 142, '08.
 Symons, Md. Hort. Soc., 1908, 172, '09.
 Symons, J. Ec. Ent. II, 248, 1909.
 Symons, Md. Hort. Soc., 1909, 164, '10.
 Symons, J. Ec. Ent. III, 237, 1910.
 Symons, Md. Hort. Soc., 1910, 106, '11.
 Symons, Md. Hort. Soc., 1912, 177, '13.
 Symons, Md. Hort. Soc., 1913, 111, '14.
 Symons, Norton & Close, Md. B. 130, 81, 1908.
 Taft, Mich. Bd. Agr. R. 45, 78, 1906.
 Taft, Mich. Bd. Agr. R. 46, 86, 1907.
 Taft, Mich. R. 48, 103, 1909.
 Taft, Mich. R. 42, 128, 1913.
 Taft, Mich. R. 53, 155, 1914.
 Troop, Ind. Hort. Soc. f. 1904, 96, '05.
 Troop, Ind. Hort. Soc. f. 1905, 94, '06.
 Troop, Ind. Hort. Soc. f. 1906, 123, '07.
 Volck, Pac. Rur. Press, LXXXI, 172, 1911.
 Washburn, J. Ec. Ent. II, 246, 1909.
 Washburn, Minn. Hort. Soc., 1911, 321.
 Washburn, J. Ec. Ent. VI, 259, 1913.
 Washburn, Minn. R. 15, 20, 1914.
 Washburn, Minn. Hort. Soc., 1914, 472.
 Washburn & Spangler, J. Ec. Ent. VII, 119, 1914.
 Weary Worm, Can. Hort. XXXIII, 185, 1910.
 Worsham, Ga. Bd. Ent. B. 27, 70, '08.
 ——— Colo. Bd. Hort. R. f. 1909, 117, 1910.
 ——— Ohio Bd. Agr. R. 65, '10, 539.
 ——— Mo. Hort. Soc., 1908, 18.
 ——— Mo. Hort. Soc., 1910, 52.
 ——— Mont. Bd. Hort. f. 1903-1904, 40, 1905.
 ——— N. J. Bd. Agr. R. 41, 205, 1914.
 ——— S. D. Hort. Soc. 3rd R. 150, '06.
 ——— Tenn. Dept. Agr. Bien. R., 1905-1906, 205.
 ——— Tenn. Bd. Ent. B. 7, 3, 1912.
 ——— Utah, Hort. Comm. Bien. R. f. 1911-1912, 19, 1912.
 ——— Wash. Dept. Agr. R. 1, 40, 1914.
 ——— W. Va. Crop Pest Comm. B. 2, 3, 1913.

- Wyo. Bd. Hort. 1st Bien. R., 25, 1905-1906.
- Inspection, florists' plants**
Morrill, S. W. Stockm., Oct. 3, 1913, 10.
- Inspection, imported stock**
Britton & Walden, Conn. R. 11, 271, '12.
Britton & Walden, Conn. R. 12, 220, '13.
Britton & Walden, Conn. R. 13, 191, '13.
Gardner, Me. Comm. Agr. R., 1912, 75.
Gardner, Me. Comm. Agr. R., 1913, 84, 1914.
Howard, J. Ec. Ent. III, 76, 1910.
Washburn, Minn. Ent. R. 13, 59, 1910.
Washburn, Minn. R. 14, 103, 1912.
Washburn, Minn. R. 15, 20, 1914.
- Inspection laws**
Berger, Fla. Dept. Agr. Quart. B. 2, vol. 22, 37, 1912.
Eckert, Northw. Hort., Dec. '06, 265.
Morrill, S. W. Stockm., Oct. 16, 1914, 10.
Morrill, S. W. Stockm., Oct. 23, '14, 10.
Morrill, S. W. Stockm., Oct. 30, '14, 10.
Roeding, Cal. Hort. Comm. Bien. R. 2, 417, 1907.
Roeding, Rur. Cal., Jan. 1907, 16.
Sanders, Ill. Hort. Soc. f., 1911, 81, 1912.
Stewart, W. Va. R. f., 1907-1908, 11.
Washburn, Minn. R. 15, 43, 1914.
——— U. S. D. A. Off. Sec'y., C. 37.
- Instant Louse Killer**
——— U. S. D. A. Ins. & Fung. No. 26, 1912.
- Io moth, see Automeris io**
- Iphis ovalis**
Marlatt, U. S. B. 71, 137, 1907.
- Ips, see Tomiscus**
- Irbisia brachycerus**
Vosler, Cal. Hort. B. II, 6, 551, 1913.
- Iridomyrmex analis**
Hunter & Pierce, U. S. B. 114, 140, '12.
Pierce, U. S. B. 100, 72, 1912.
- Iridomyrmex humilis**
Bache, C. Gentl., May 11, 1913, 467.
Byrd, Cal. Cult. XLI, 273, 646, 1913.
Crawford, Cal. Hort. B. III, 10, 438, '14.
Dean, J. Ec. Ent. III, 207, 1910.
Dean, U. S. B. 85, 44, 1911.
Foster, J. Ec. Ent. I, 289, 1908.
Herrick, Household Ins. 183, 1914.
Hinds, Ala. Poly. R. 20, 36, 1908.
Howard, U. S. R. Ent., 1911, 16.
Howard, U. S. R. Ent., 1912, 17.
- Hunter & Pierce, U. S. B. 114, 140, '12.
Newell, La. Crop Pest Comm. C. 13, 9, 1907.
Newell, J. Ec. Ent. I, 21, 262, 1908.
Newell, J. Ec. Ent. II, 174, 324, 1909.
Newell, J. Ec. Ent. VII, 147, 1914.
Newell, J. Ec. Ent. VII, 153, 1914.
Newell & Barber, U. S. B. 122, 9, 1913.
Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 112, 1909.
Nickels, J. Ec. Ent. IV, 353, 1911.
O'Kane, Inj. Ins. 351, 1914.
Pierce, U. S. B. 100, 73, 1912.
Quarles, Tex. Stockm. Farm., Feb. 8, 1911, 13.
Smith, N. J. Bd. Agr. R. 37, 184, 1910.
Titus, U. S. B. 52, 79, 1905.
Woodworth, Cal. C. 38, 5, 1908.
Woodworth, Cal. B. 207, 53, 1910.
——— Rur. Cal., Oct. 1908, 328.
——— U. S. Y. B., 1907, 542.
- Iron arsenate**
Can. Hort. XXXIII, 41, 1910.
- Ischnaspis longirostris**
Britton, Conn. B. 151, 16, 1905.
Britton, Conn. R. 5, 245, 1906.
- Ischnodemus falicus**
Webster, U. S. B. 69, 32, 1907.
- Ischnoptera pennsylvanica**
Whitman, Ohio B. 253, 126, 1912.
- Ischnura posita**
Quaintance, U. S. C. 102, 7, 1908.
- Isia isabella**
Cotton, Ohio Nurs. Orch. Insp. B. 7, 54, 1906.
Douglass, Ind. Ent. R. 2, 50, 1910.
Forbes, Ill. Ent. R. 23, 71, 72, 1905.
Lochhead, Syn. Ec. Ent. 66, 1914.
- Isocyrus pegomyiae**
Washburn, Minn. R. 12, 132, 1908.
- Isosoma grande**
Bruner & Swenk, Nebr. B. 96, 30, 1907.
Dean, Kans. Agr. Educ. I, 4, 36, 1909.
Gossard, Ohio B. 233, 66, 1911.
Headlee, Kans. P. B. 165, 1908.
Headlee, Kans. Farm., July 17, 1909, 1.
Headlee, Kans. Farm., Aug. 21, 1909, 3.
O'Kane, Inj. Ins. 131, 1914.
Reeves, Wash. P. B., Nov. 1907.
Sanderson, Ins. Pests, 138, 1912.
Webster, U. S. C. 106, 1, 1909.
Webster, U. S. Y. B., 1907, 255.

- U. S. Y. B., 1905, 634.
 ——— U. S. Y. B., 1907, 542.
 ——— U. S. Y. B., 1908, 568.
- Isosoma hordei**
 Gossard, Ohio B. 233, 70, 1911.
 Lochhead, Ont. Ent. Soc. R. 36, 129, '06.
 O'Kane, Inj. Ins. 130, 1914.
- Isosoma orchidearum**
 Davis, Ill. Ent. R. 27, 135, 1912.
 Morris, Ont. Ent. Soc. R. 44, 24, 1914.
 Whitney, Cal. Hort. B. III, 11, 483, '14.
- Isosoma sp.**
 Fletcher, Can. Exp. Farms B. 52, 14, '05.
 Webster, Am. Agric., May 27, '05, 600.
 Webster, Pr. Ent. Soc. Wash. VII, 114, 1905.
 Webster, Or. Judd Farm., May 27, 1905, 674.
 ——— U. S. Y. B., 1905, 634.
 ——— U. S. Y. B., 1908, 568.
- Isosoma spp.**
 Haseman, Mo. Bd. Agr. R. 44, 285, '12.
 Howard, U. S. R. Ent., 1906, 20.
 Howard, U. S. R. Ent., 1908, 23.
- Isosoma tritici**
 Bethune, Ont. Ent. Soc. R. 39, 130, '09.
 Dean, Kans. Agr. Educ. I, 4, 34, 1909.
 Fletcher, Ont. Ent. Soc. R. 36, 81, 1906.
 Gossard, Ohio B. 198, 33, 1908.
 Gossard, Ohio P. B. 293, 1908.
 Gossard, Ohio P. B. 296, 1908.
 Gossard, Ohio P. B. 302, 1908.
 Gossard, C. Gentl., 1909, 598.
 Gossard, Farm. Guide, May 22, '09, 6.
 Gossard, O. Farm. Sept. 11, 1909, 197.
 Gossard, Ohio B. 233, 64, 1911.
 Houser, Ohio B. 226, 175, 1911.
 Lochhead, Syn. Ec. Ent. 99, 1914.
 O'Kane, Inj. Ins. 129, 1914.
 Pettit, Mich. Bd. Agr. R. 45, 115, 1906.
 Pettit, Mich. B. 244, 221, 1907.
 Pettit, Mich. Farm., Mar. 16, 1907, v. 51, p. 283.
 Pettit, Mich. B. 258, 311, 1910.
 Sanderson, Ins. Pests, 136, 1912.
 Shaw, Ohio Bd. Agr. R. 63, 1908, 697.
 Shaw, Ohio Nurs. Orch. Insp. R. 7, 19, 1909.
 Smith, U. S. B. 67, 102, 1907.
 Symons, Md. B. 101, 165, 1905.
 Troop, Farm Guide, Aug. 1, 1908, 3.
 Troop, Ind. Farm., Aug. 8, 1908, 8.
- Troop, Farm. Guide, July 22, 1911, 5.
 Troop, Farm. Guide, June 28, 1913, 15.
 Webster, Conn. Farm., Dec. 30, '05, 15.
 Webster, U. S. B. 67, 97, 1907.
 Webster, U. S. Y. B., 1907, 255.
 Webster, U. S. C. 66 Rev. Ed., 1, 1908.
 Webster, U. S. Y. B., 1908, 374.
 ——— Mich. Farm., July 28, 1906, v. 50, p. 49.
 ——— U. S. Y. B., 1905, 634.
 ——— U. S. Y. B., 1906, 509.
 ——— U. S. Y. B., 1908, 568.
- Isosoma vitis**
 Ehrhorn, Pac. Rur. Press, LXXXVI, 404, 1908.
 Quaintance & Shear, U. S. F. B. 284, 12, 1907.
- Isotoma fimetaria**
 Britton, Conn. R. 10, 711, 1911.
- Isotoma sp.**
 Britton, Conn. R. 10, 712, 1911.
- Italian pear scale, see Epidiaspis piricola**
- Itch mite, see Sarcoptes**
- Itchyercus noveboracensis**
 Baldwin, Ind. Ent. R. 5, 82, 1912.
 Britton, Conn. R. 8, 845, 1909.
 Douglass, Ind. Ent. R. 2, 86, 1910.
 Douglass, Ind. Ent. R. 3, 101, 1910.
 Felt, N. Y. St. Mus. Mem. 8, 517, 1906.
 Newell & Smith, U. S. B. 52, 70, 1905.
 O'Kane, Inj. Ins. 329, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 210, 1914.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 8.
 Washburn, U. S. B. 60, 85, 1906.
 ——— U. S. Y. B., 1905, 633.
- Itionida inopis**
 Felt, J. Ec. Ent. V, 368, 1912.
 Felt, J. Ec. Ent. VI, 331, 1913.
- Itionida tritici, see Contarinia**
- Itoplectis, see Pimpla**
- Ivory soap**
 Stone & Fernald, Mass. B. 123, 11, '08.
- Ixodes angustus**
 Hadwen, Pr. Ent. Soc. B. C., 1, 37, '11.
- Ixodes cookei**
 Hunter & Hooker, U. S. B. 72, 55, 1907.
- Ixodes hexagonus**
 Cary, Ala. Poly. B. 141, 147, 1907.
 Mohler, U. S. B. An. I. B. 78, '05, 15.

- Mohler, U. S. F. B. 258, 17, 1906.
 Mohler, U. S. F. B. 569, 10, 1914.
- Ixodes kingi**
 Hooker, Bishopp & Wood, U. S. B. 106, 82, 1912.
- Ixodes ricinus**
 Cary, Ala. Poly. B. 141, 143, 1907.
 Hunter & Hooker, U. S. B. 72, 56, 1907.
 Mohler, U. S. B. An. I. B. 78, 1905, 14.
 Mohler, U. S. F. B. 258, 13, 1906.
 Mohler, U. S. F. B. 569, 7, 1914.
- Ixodes scapularis**
 Hooker, Bishopp & Wood, U. S. B. 106, 76, 1912.
 Hunter & Hooker, U. S. B. 72, 57, 1907.
- Ixodes sculptus**
 Hunter & Hooker, U. S. B. 72, 58, 1907.
- Ixodes texanus**
 Hadwen, Pr. Ent. Soc. B. C. 1, 38, 1911.
- Ixodiasis**
 Kieffer, Jr. Amer. Med. Assoc., XLVIII, 1154, 1907.
- Ixodidae, biology**
 Hooker, Bishopp & Wood, U. S. B. 106, 1912.
- Ixodiphagus texanus**
 Hooker, Bishopp & Wood, U. S. B. 106, 96, 1912.
- Ixodoidea**
 Banks, Tech. B. 15, U. S. Bur. Ent., 1908.
- Ivy scale, see Aspidiotus hederae**
- Jadera haematoloma**
 Morrill, U. S. B. 86, 91, 1910.
 Sanderson, U. S. F. B. 223, 21, 1905.
 Sanderson, U. S. B. 57, 47, 1906.
- Jalysus spinosus**
 Somes, Mo. Fr. Exp. Sta. Bien., 1913-1914, 16.
- Janthinosoma musica**
 Coffin, Md. B. 109, 102, 1906.
 Smith, N. J. R., 1910, 422.
- Janus integer**
 Caesar, Ont. Ent. Soc. R. 43, 81, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 302, 1905.
 Gossard, Ohio B. 233, 144, 1911.
 Lochhead, Syn. Ec. Ent. 98, 1914.
 O'Kane, Inj. Ins. 246, 1914.
 Sanderson, Ins. Pests, 478, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 357, 1914.
- Japanese wax scale, see Ceroplastes ceriferus**
- Jarvis Spraying Compound**
 Jarvis, Conn. Storrs B. 54, 177, 1908.
- Jassidae**
 Gahan, Md. Hort. Soc., 1905, 80, 1906.
 Surface, Pa. D. A. Zoöl. III, 1, 11, 1913.
- Jassidae, New York**
 Osborn, N. Y. R. 20, 399, 1905.
- Jassids, biting**
 Tucker, Can. Ent., 1911, 29.
- Jerusalem cricket, see Anabrus simplex**
- Jiggers, see Trombidium larva**
- Joint-worm, see Isosoma tritici**
- Julus coeruleocinctus**
 Forbes, Ill. Ent. R. 23, 223, 1905.
- Julus hortensis**
 Brittain, Pr. Ent. Soc. B. C. 4, 18, 1914.
 Britton, Conn. R. 7, 337, 1908.
 Britton, Conn. R. 12, 295, 1913.
- June beetle, see Lachnosterna**
- Juniper scale, see Diaspis carueli**
- Kaliosysphinga dohrnii**
 Smith, N. Y. C. B. 233, 58, 1905.
 Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
 Weiss, J. Ec. Ent. VII, 251, 1914.
- Kaliosysphinga ulmi**
 Felt, N. Y. St. Mus. Mem. 8, 162, 1905.
 Felt, N. Y. R. 24, 49, 1909.
 Fernald, J. Ec. Ent. V, 247, 1912.
 Herrick, J. Ec. Ent. V, 171, 1912.
 Herrick, N. Y. C. B. 333, 492, 1913.
 Slingerland, N. Y. C. B. 233, 49, 1905.
- Katydid, see Microcentrum laurifolium**
- Kedzie mixture (arsenical)**
 Taft, Mich. Hort. Soc., 1910, 119, 1911.
 — Mich. Sp. B. 51, 434, 1910.
- Kelep, see Ectatomma tuberculata**
- Kellogg's Ant Paste**
 — U. S. D. A. Ins. & Fung. No. 59, 1913.
- Kermes andrei**
 Britton, Conn. R. 5, 235, 1906.
 Douglass, Ind. Ent. R. 4, 151, 1912.
- Kermes austini**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 168, 1907.
- Kermes cockerelli**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 168, 1907.

Kermes galliformis

Britton, Conn. R. 5, 235, 1906.

Carnes, Cal. Hort. Comm. Bien. R. 2, 169, 1907.

Douglass, Ind. Ent. R. 4, 151, 1912.

Kermes nigropunctatus

Carnes, Cal. Hort. Comm. Bien. R. 2, 169, 1907.

Kermes pettiti

Douglass, Ind. Ent. R. 4, 151, 1912.

Kermes pubescens

Douglass, Ind. Ent. R. 4, 154, 1914.

Garman, Ky. B. 120, 51, 1905.

Jarvis, Ont. Ent. Soc. R. 38, 66, 1908.

Kerosene

Smith, N. J. B. 213, 19, 1908.

Kerosene emulsion

Fernald, Mass. B. 125, 63, 1908.

Greiner, Farm & Fireside, Sept. 1, '05, 2.

Jarvis, Conn. Storrs B. 56, 228, 1909.

Johnson, Farm. Guide, Aug. 19, '11, 5.

Johnson, Green's Fr. Grow., Dec. '11, 18.

Johnson, S. W. Stockm., July 21, '11, 9.

Morris & Parker, Mont. C. 36, 246, '14.

Penny, Del. B. 75, 1906.

Pickett, Ill. Hort. Soc. f. 1907, 382.

Shutt, Can. Hort. XXVIII, 165, 1905.

Shutt, Can. Hort. XXX, 109, 1907.

Shutt & Macoun, Can. Hort. XXVIII, 210, 1905.

Slingerland & Crosby, N. Y. C. B. 252, 347, 1908.

Slingerland, Herrick & Crosby, N. Y. C. B. 283, 476, 1910.

Sherman, N. C. Dept. Agr. B., June 1909, 18.

Sherman, N. C. Dept. Agr. B., June 1912, 22.

Smith, Nebr. Bd. Agr. R. f. 1908, 309.

Stone & Fernald, Mass. B. 123, 9, '08.

Van Buren & Husted, N. Y. Dept. Agr. B. 24, 484, 1911.

——— C. Gentl. 1905, 608.

——— Mich. Sp. B. 51, 435, 1910.

——— U. S. D. A. Ins. & Fung. Bd., Ins. 2, p. 27, 1914.

——— U. S. D. A. Ins. & Fung. No. 31, 1914.

Kerosene-lime mixture

Hodgkiss & Sirrine, N. Y. St. B. 273, 482, 1905.

Parrott, N. Y. Fr. Grow. Assoc., '06, 133.

Kerosene, lime and sulphur

——— Rur. N. Y., 1905, 757.

Kerosene-limoid

Parrott, N. Y. Fr. Grow. Assoc., '06, 25.

Smith, N. J. R., 1905, 622.

Smith, N. J. R., 1906, 601.

Taft, Nat'l Fr. Grow., Mar. 1905, 9.

Kerosene naphthol

Smith, N. J. R., 1905, 625.

Kerosene oils

Penny, Pa. B. 86, 10, 1908.

Kerosene, paraffin oil and rosin oil

Penny, Pa. B. 86, 11, 1908.

Kerosene, petroleum mixtures

Taft, Nat'l Fr. Grow., Mar. 1905, 9.

Kerosene, rosin oil

Penny, Pa. B. 86, 10, 1908.

Kerosene vs. heavy oils

Penny, Pa. B. 86, 4, 1908.

Kibler's Strictly Pure Arsenate of Lead

——— U. S. D. A. Ins. & Fung. Bd., Ins. 1, p. 22, 1914.

Kibler's Strictly Pure Paris Green

——— U. S. D. A. Ins. & Fung. No. 88, 1913.

Killarvae

Smith, N. J. R., 1906, 584, 651.

Smith, N. J. R., 1907, 539.

Kil-O-Scale

Fernald, Mass. B. 116, 17, 1907.

Jarvis, Conn. Storrs B. 54, 178, 1908.

Phillips, South. Plant., Mar. 1906, 209.

Smith, N. J. R. f. 1904, 646, 1905.

Smith, N. J. R., 1905, 608, 615.

Smith, N. J. R., 1906, 596.

Smith, Ga. Bd. Ent. B. 21, 217, 1906.

Taft, Nat'l Fr. Grow., Mar. 1905, 9.

Worsham, Pr. Ga. Hort. Soc., 1908, 74.

Kissing bug, see Melanolestes and Reduvius**K-L**

Brown, Can. Hort. XXVIII, 176, 1905.

Close, Del. B. 73, 1906.

Smith, N. J. R., 1905, 622.

Smith, N. J. R., 1906, 601.

Klinophilus, see Cimex**Knemidocoptes, see Cnemidocoptes****Konowia attenuata**

Felt, N. Y. St. Mus. Mem. 8, 466, 1906.

Kreso No. 1

Morris & Parker, Mont. C. 36, 250, 1914.

Kretol

- U. S. D. A. Ins. & Fung. Bd. Ins.
5, p. 73, 1914.

Krysol

- U. S. D. A. Ins. & Fung. No. 51,
1913.

Labronchus sp.

- Patch, Me. B. 148, 265, 1907.

Lachnopus hispidis

- Berger, Fla. R., 1908, lx.

Lachnosterna arcuata

- Close, Ballard & White, Md. B. 160, 219,
1911.
Davis, U. S. F. B. 543, 8, 1913.
Glasgow, Prai. Farm., Sept. 15, '12, 9.
Glasgow, Prai. Farm., Oct. 15, 1912, 9.
Lochhead, Ont. Ent. Soc. R. 40, 72, '10.
Symons, Md. B. 101, 158, 1905.
——— U. S. Y. B., 1907, 546.

Lachnosterna crenulata

- Britton, Conn. R. 12, 289, 1913.

Lachnosterna cribrosa

- Sanderson, U. S. F. B. 223, 13, 1905.
Sanderson, U. S. B. 57, 16, 1906.

Lachnosterna farcta

- Davis, U. S. F. B. 543, 8, 1913.
Sanderson, U. S. F. B. 223, 13, 1905.
Sanderson, U. S. B. 57, 19, 1906.

Lachnosterna fraterna

- Britton, Conn. R. 12, 289, 1913.
Britton, Conn. R. 13, 230, 1914.

Lachnosterna fusca

- Britton, Conn. R. 9, 372, 1910.
Britton, Conn. R. 12, 288, 1913.
Britton, Conn. R. 13, 229, 1914.
Chandler, Mo. B. 102, 263, 1912.
Cook, Cal. Hort. B. III, 1, 29, 1914.
Criddle, J. Ec. Ent. IV, 240, 1910.
Davis, U. S. F. B. 543, 5, 1913.
Felt, C. Gentl., 1908, 107.
Felt, J. Ec. Ent. I, 150, 1908.
Felt, N. Y. R. 23, 41, 1908.
Fletcher, Can. Exp. Farms, B. 52, 19,
1905.
Forbes, Ill. B. 116, 451, 1907.
Gossard, Ohio B. 198, 67, 1908.
Gossard, Ohio P. B. 357, 1914.
Haseman, Ind. Farm., June 20, 1908, 2.
Kohler, Iowa Agric., Nov. 1905, 85.
Lochhead & Jarvis, Ont. Agr. Coll. B.
150, 15, 1906.

- Pease, Mich. Farm., May 30, '14, 572.
Scholl, Tex. Stockm. Farm., Dec. 8,
1909, 7.
Washburn, Minn. R. 12, 148, 1908.
——— U. S. Y. B., 1905, 630.
——— U. S. Y. B., 1907, 546, 549.

Lachnosterna gibbosa

- Forbes, Ill. B. 116, 451, 1907.

Lachnosterna hirticula

- Britton, Conn. R. 12, 289, 1913.
Chittenden, Nut Grow., Mar. '06, 140.
Forbes, Ill. B. 116, 451, 1907.
Garman, Ky. B. 120, 76, 1905.
Smith, Ga. Bd. Ent. B. 20, 168, 1906.
Smith & Lewis, U. S. B. 60, 80, 1906.

Lachnosterna ilicis

- Forbes, Ill. B. 116, 451, 1907.

Lachnosterna implicita

- Forbes, Ill. B. 116, 451, 1907.

Lachnosterna inversa

- Forbes, Ill. B. 116, 451, 1907.
Smith, Ga. Bd. Ent. B. 20, 168, 1906.
Smith & Lewis, U. S. B. 60, 80, 1906.

Lachnosterna lanceolata

- Forbes, Ill. Ent. R. 23, 184, 1905.
Sanderson, U. S. F. B. 223, 13, 1905.
Sanderson, U. S. B. 57, 18, 1906.

Lachnosterna nova

- Britton, Conn. R. 12, 289, 1913.

Lachnosterna pruinina

- Newell & Rosenfeld, J. Ec. Ent. I, 154,
1908.
——— U. S. Y. B., 1907, 549.

Lachnosterna rugosa

- Forbes, Ill. B. 116, 451, 1907.
Washburn, Minn. R. 12, 148, 1908.
——— U. S. Y. B., 1908, 573.

Lachnosterna sp.

- Baldwin, Ind. Ent. R. 5, 130, 1912.
Bethune, Ont. Agr. Coll. B. 171, 8, '09.
Britton, Conn. R. 10, 709, 1911.
Douglass, Ind. Ent. R. 2, 80, 1910.
Douglass, Ind. Ent. R. 3, 99, 1910.
Douglass, Ind. Ent. R. 4, 140, 1912.
Felt, N. Y. R. 27, 115, 1912.
Felt, J. Ec. Ent. V, 398, 1912.
Forbes, Ill. Ent. R. 24, 135, 1908.
Hadley, Nat'l Stockm. & Farm., Aug.
10, 1911, 7.
Lochhead, Syn. Ec. Ent. 72, 1914.
Lovett, Oreg. Coll. B. 91, 8, 1913.
Menges, Pa. Dept. Agr. B. 238, 113, '13.

Lachnosterna sp. (Cont'd)

- Menges, Pa. R. 18, 414, 1914.
 O'Kane, Inj. Ins. 109, 1914.
 Oskamp, Ind. B. 164, 763, 1913.
 Pettit, Am. Agric., Nov. 6, 1909, 442.
 Sears, Can. Hort. XXVIII, 346, 1905.
 Slingerland & Crosby, Man. Fr. Ins. 393, 1914.
 Smith, N. J. R., 1911, 441.
 Surface, Pa. D. A. Zoöl. V. 12, 389, '08.
 Surface, Pa. D. A. Zoöl. I, 4, 155, 1911.
 Swenk, Nebr. Bd. Agr. R. f. '08, 296.
 Swenk, Nebr. Bd. Agr. R. f. '10, 368.
 Van Hoesen, Nat'l Stockm. & Farm., Dec. 29, 1910, 5.
 Washburn, U. S. B. 60, 85, 1906.
 Webster, U. S. Y. B., 1908, 381.
 West, Prai. Farm., Mar. 16, 1908, 4.
 Rur. N. Y., 1905, 775.
 ——— U. S. Y. B., 1906, 512.
 ——— U. S. Y. B., 1907, 549.

Lachnosterna spp. in gardens

- Conradi, Tex. B. 89, 13, 1907.
 Smith, N. C. B. 197, 53, 1908.

Lachnosterna sp. on catalpa

- Cotton, Ohio Nurs. Orch. Insp. B. 7, 55, 1906.

Lachnosterna sp. on corn

- Dean, Kans. Agr. Educ. I, 4, 8, 1909.
 Pettit, Mich. B. 233, 204, 1906.
 Stedman, Mo. Bd. Agr. R. 38, 263, '06.

Lachnosterna sp. on strawberries

- Clement, Ont. Dept. Agr. Fr. B. 210, 17, 1913.
 Moore, Wis. B. 190, 32, 1910.
 Price, Va. C. 7, 50, 1909.

Lachnosterna spp.

- Britton, Conn. Farm., Feb. 19, 1910, 3.
 Chittenden, Ins. Inj. Veg. 75, 1907.
 Conradi, Tex. Stockm. Farm., Apr. 11, 1906, 2.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 122, 1913.
 Douglass, Ind. Ent. R. 1, 151, 1908.
 Felt, N. Y. R., 1906, 93.
 Felt, N. Y. R. 27, 1912, 115.
 Felt, N. Y. R. 28, 1913, 56.
 Garcia, N. Mex. B. 68, 36, 1908.
 Gossard, O. Farm., June 22, 1912, 738.
 Gossard, O. Farm., Sept. 28, '12, 267.
 Haseman, Mo. Bd. Agr. R. 44, 268, 1912.

Headlee, Or. Judd Farm., Mar. 7, '08, 292.

- Hine, O. Farm., Oct. 6, 1906, 239.
 Holloway, U. S. C. 171, 5, 1913.
 Moore, Minn. R. 16, 54, 1914.
 Nichelson, Okla. B. 69, 17, 1905.
 Pettit, Mich. B. 233, 204, 1906.
 Popenoe, Kans. Farm., June 13, '07, 705.
 Rosenfeld, La. Hort. Soc., '08, 112.
 Sanderson, Ins. Pests, 79, 1912.
 Surface, Pa. D. A. Zoöl. III, 1, 26, 1913.
 Washburn, Minn. R. 11, 74, 1906.
 Weiss, N. J. R., 1912, 442.
 Williams, O. Farm., Nov. 9, 1912, 450.
 Woods, Me. B. 137, 285, 1906.
 ——— C. Gentl., 1907, 421.
 ——— Rur. N. Y., 1908, 783.
 ——— U. S. Y. B., 1908, 570.

Lachnosterna spp., see also white grubs**Lachnosterna spp., disease of**

- Northrup, Mich. Tech. B. 18, 491, 1914.

Lachnosterna submucida

- U. S. Y. B., 1907, 549.

Lachnosterna tristis

- Davis, J. Ec. Ent. VI, 276, 1913.
 Davis, U. S. F. B. 543, 8, 1913.
 Forbes, Ill. B. 116, 451, 1907.

Lachnus curvipes

- Patch, Me. B. 202, 161, 1913.

Lachnus hyalinus

- Patch, Me. B. 202, 165, 1913.

Lachnus larifex

- Patch, Me. B. 202, 164, 1913.

Lachnus pini

- Patch, Me. B. 202, 168, 1913.

Lachnus occidentalis

- Davidson, J. Ec. Ent. III, 374, 1910.

Lachnus strobil

- Patch, Me. B. 202, 167, 1913.

Laelaps agilis

- Banks, Pub. Health Mar. Hosp. Serv. B. 30, 83, 1910.

Laelaps echidninus

- Banks, Pub. Health Mar. Hosp. Serv. B. 30, 83, 1910.

Laelaps macropilis

- Russell, U. S. B. 64, 52, 1909.

Laelaps stabularis

- Banks, Pub. Health Mar. Hosp. Serv. B. 30, 84, 1910.

Laemophloeus biguttatus

- Felt, N. Y. St. Mus. Mem. 8, 490, 1906.

Laemophloeus minutus

- Dean, Kans. B. 189, 205, 1913.
Whitmarsh, Ohio B. 253, 145, 1912.

Laemophloeus pusillus

- Chittenden, Amer. Mill., July 1, '09, 550.

Laemophloeus testaceus

- Felt, N. Y. St. Mus. Mem. 8, 490, 1906.

Laetilia coccidivora

- Cotton, Ohio Nurs. Orch. Insp. B. 7, 34, 1906.
Dickerson, U. S. B. 67, 49, 1907.
Gossard, Fla. B. 79, 314, 1905.
Johnson, Colo. B. 116, 10, 1906.
Sanders, U. S. C. 64, 4, 1905.
Smith, N. J. R., 1905, 599.
Tucker, La. B. 145, 7, 1914.

Lagoa crispata

- Felt, N. Y. St. Mus. Mem. 8, 529, 1906.
Gossard, Ohio B. 233, 120, 1911.
Herrick, Household Ins. 427, 1914.

Lagoa opercularis

- Slingerland, Rur. N. Y., 1905, 742.

Languria mozardi

- Folsom, Ill. B. 134, 178, 1909.
Folsom, Ill. Ent. R. 125, 106, 1909.
Garman, Ky. B. 125, 48, 1906.
Gossard, Ohio B. 233, 82, 1911.
O'Kane, Inj. Ins. 127, 1914.
Pettit, Mich. B. 258, 280, 1910.
Sanderson, Ins. Pests, 202, 1912.

Lapara bombycoides

- Felt, N. Y. St. Mus. Mem. 8, 679, 1906.
Patch, Me. B. 162, 358, 1908.

Laphygma exigua

- Ball, Deseret Farm., June 23, 1906, 1.
Chittenden, Ins. Inj. Veg. 125, 1907.
Cooley, Mont. R. 12, 265, 1906.
Essig, Cal. Hort. B. II, 1-2, 162, 1913.
Gillette, Colo. B. 98, 13, 1905.
O'Kane, Inj. Ins. 174, 1914.
Sanborn, Okla. B. 100, 14, 1912.
Sanderson, U. S. F. B. 223, 14, 1905.
Sanderson, U. S. B. 57, 35, 1906.
Sanderson, Ins. Pests, 334, 1912.
Titus, Deseret Farm., Mar. 28, 1908, 6.
——— U. S. Y. B., 1908, 571.

Laphygma frugiperda

- Baldwin, Ind. Ent. R. 5, 150, 1912.
Ball & Leidigh, U. S. F. B. 322, 21, '08.
Britton, J. Ec. Ent. V, 465, 1912.
Britton, Conn. R. 12, 284, 1913.
Chittenden, Ins. Inj. Veg. 56, 128, '07.

Cory, Md. Hort. Soc., 1912, 190, '13.

Dean, Kans. Agr. Educ. I, 4, 76, 1909.

Dew, J. Ec. Ent. VI, 361, 1913.

Dew, Prog. Farm., Oct. 12, 1912, 1063.

Felt, J. Ec. Ent. V, 403, 1912.

Felt, N. Y. R. 28, 42, 1913.

Fernald, Mass. R. 25, II, 87, 1913.

Forbes, Ill. Ent. R. 23, 81, 1905.

Garcia, N. Mex. B. 68, 31, 1908.

Garman, J. Ec. Ent. V, 467, 1912.

Girault, Ent. News, 1912, 405.

Gossard, Ohio B. 233, 61, 1911.

Haseman, Col. Rur. World, Oct. 11, '11, 321.

Haseman, Mo. P. B. 2, 1912.

Haseman, Mo. Bd. Agr. R. 44, 279, '12.

Headlee, Kans. B. 155, 335, 1908.

Headlee, Kans. R. 21, 1, 1908.

Hinds, Ala. P. B. 57, 1912.

Hinds, Ala. Poly. B. 25, 22, 1913.

Holloway, U. S. C. 171, 5, 1913.

Howard, U. S. R. Ent., 1913, 7.

Jones, J. Ec. Ent. VI, 230, 1913.

Luginbill, S. C. Dept. Agr. R. 10, 265, 1914.

Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 118, 1909.

O'Kane, Inj. Ins. 173, 1914.

Pettit, Mich. B. 233, 212, 1906.

Pettit, Mich. B. 258, 296, 1910.

Popenoe, Kans. Farm., Sept. 12, 1907, 1011.

Quaintance & Brues, U. S. B. 50, 106, 1905.

Rosenfeld, J. Ec. Ent. III, 214, 1910.

Sanderson, U. S. F. B. 223, 15, 1905.

Sanderson, Ins. Pests, 118, 1912.

Sherman, N. C. Dept. Agr. B. 26, 5, 38, 1905.

Sherman, Prog. Farm., Sept. 27, 1906, 15.

Sherman, N. C. Dept. Agr. B. 35, 5, 38, 1914.

Smith, Ga. Bd. Ent. B. 20, 170, 1906.

Smith, N. J. R., 1906, 523.

Smith, U. S. B. 67, 102, 1907.

Smith & Lewis, U. S. B. 60, 81, 1906.

Stedman, Mo. Bd. Agr. R. 38, 321, '06.

Swenk, Nebr. Farm., Oct. 25, '11, 1015.

Swenk, Nebr. Ent. B. 1, 48, 1913.

Symons & Cory, Md. B. 175, 177, 1913.

Troop, Farm. Guide, Oct. 5, 1912, 19.

Laphygma frugiperda (*Cont'd*)

- Troop, J. Ec. Ent. V, 490, 1912.
 Troop, Ind. R. 26, 49, 1913.
 Tucker, Kans. Farm., Feb. 9, '05, 146.
 Watson, Fla. R., 1912, lxii.
 Watson, Fla. R., 1913, lkv.
 Wilson, Fla. Grow., Nov. 2, 1912, 3.
 Worsham, Ga. Bd. Ent. B. 36, 6, 1912.
 ——— U. S. D. A. Off. Sec'y. C. 40, '14.
 ——— U. S. Y. B., 1905, 634.
 ——— U. S. Y. B., 1906, 510.
 ——— U. S. Y. B., 1907, 543.

Larch insects

Swaine, Ont. Ent. Soc. R. 41, 81, '11.

Larch sawfly, *see* **Nematus erichsonii****Larder beetle**, *see* **Dermestes lardarius****Large American sawfly**, *see* **Cimbex americana****Larger beet leaf-beetle**, *see* **Monoxia puncticollis****Larger chestnut weevil**, *see* **Balaninus proboscideus****Larger corn stalk-borer**, *see* **Diatraea zeacolella****Larger elm leaf-beetle** *see* **Monocesta coryli****Larger fir-tree bark-beetle**, *see* **Hylesinus granulatus****Larger grain-borer**, *see* **Dinoderus truncatus****Larger Mexican pine beetle**, *see* **Dendroctonus parallelocollis****Larger sweet-potato sawfly**, *see* **Schizocercus privatus****Largus succinctus**

- Hinds, U. S. B. 59, 29, 1906.
 Morrill, U. S. B. 86, 94, 1910.
 Sanderson, U. S. F. B. 223, 21, 1905.
 Sanderson, U. S. B. 57, 46, 1906.
 ——— Pac. Rur. Press LXXXVII, 591, 1914.

Laria *see* **Bruchus****Lariophagus texanus**

- Hunter & Pierce, U. S. B. 114, 142, '12.
 Pierce, U. S. B. 100, 52, 1912.

Lasioderma serricorne

- Chittenden & Pratt, U. S. B. 54, 68, '05.
 Felt, N. Y. St. Mus. B. 129, 40, 1909.
 Felt, N. Y. St. Mus. B. 136, 46, 1912.
 Herrick, Household Ins. 292, 1914.
 Metcalf, N. C. Dept. Agr. Sp. B. 66, '09.
 Morgan, U. S. Y. B., 1910, 291.

O'Kane, Inj. Ins. 370, 1914.

Sanderson, Ins. Pests, 239, 1912.

Smith, N. J. B. 203, 36, 1907.

——— U. S. Y. B., 1905, 630.

——— U. S. Y. B., 1906, 516.

——— U. S. Y. B., 1907, 552.

——— U. S. Y. B., 1908, 579.

Lasioderma serricorne and Roentgen Rays

Morgan & Runner, J. Ec. Ent. VI, 226, 1913.

Lasioderma testaceum

- Britton, Conn., R. 6, 278, 1907.
 Hertzog, J. Ec. Ent. III, 198, 1910.
 Hooker, U. S. B. 67, 111, 1907.
 Symons, Md. B. 101, 173, 1905.

Lasiophthicus pyrastris

- Davidson, U. S. D. A. B. 100, 37, 1914.
 Essig, Pom. Jr. Ent. III, 611, 1911.
 Essig, Cal. Hort. B. I, 7, 290, 1912.
 Essig, Cal. Hort. B. II, 1-2, 246, 1913.
 Russell, U. S. D. A. B. 90, 10, 1914.

Lasioptera vitis

- Felt, N. Y. R. 21, 119, 1906.
 Smith, N. J. R., 1906, 528.

Lasius alienus

- Brooks, W. Va. R. f. 1909-10, 190.
 Brooks, W. Va. B. 128, 182, 1910.
 Forbes, Ill. Ent. R. 24, 14, 1905.
 Forbes, Ill. B. 130, 3, 1908.
 Gossard, Ohio B. 233, 71, 1911.

Lasius americanus

- Flint, J. Ec. Ent. VII, 476, 1914.
 Forbes, U. S. B. 60, 29, 1906.
 Forbes, Ill. B. 131, 31, 1908.
 Forbes, Ill. Ent. R. 25, 27, 1909.
 Vickery, U. S. B. 85, 102, 115, 1910.

Lasius brunneus

- Quaintance & Shear, U. S. F. B. 284, 10, 1907.

Lasius flavus

- Vickery, U. S. B. 85, 105, 1910.

Lasius interjectus

- Vickery, U. S. B. 85, 106, 116, 1910.

Lasius mixtus

- Patch, Me. B. 134, 218, 1906.

Lasius murphyi

- Vickery, U. S. B. 85, 105, 1910.

Lasius niger

- Felt, N. Y. R. 25, 86, 1910.
 Gossard, Ohio B. 233, 71, 1911.
 Sanderson, Ins. Pests, 165, 1912.

Laspyresia, *see* **Enarmonia**

- Latheticus oryzae**
Chittenden, U. S. B. 96, 25, 1911.
- Lathromeris cicadae**
Marlatt, U. S. B. 71, 131, 1907.
- Lathromeris fidae**
Johnson & Hammar, U. S. B. 89, 51, '10.
- Latreillimyia**, *see* **Belvoisia**
- Latrodectes mactans**
Herrick, Household Ins. 403, 1914.
Hodgdon, Jr. Amer. Med. Assoc. XLVIII, 1506, 1907.
- Laurel psyllid**, *see* **Triozia alacris**
- Laverna herellera**
Ehrhorn, Pac. Rur. Press, LXXVI, 372, 1908.
Melander, Wash. B. 103, 42, 1911.
- Lawson cypress bark-beetle**, *see* **Phloeosinus cupressae**
- Lead arsenate**, *see* **arsenate of lead**
- Lead chromate**
Johnston, U. S. B. 109, 53, 1912.
- Lead ortho-arsenate**
Blake, N. J. Hort. Soc., 1912, 122.
Stewart, Pa. B. 115, 22, 1912.
Stewart, Ohio Hort. Soc., 1912, 107.
- Lead ortho-arsenate**, *ammonia test for*
Stewart, Ohio Hort. Soc., 1912, 107.
Stewart, Pa. B. 115, 21, 1912.
- Leaf blister mite**, *see* **Eriophyes pyri**
- Leaf crumpler**, *see* **Mineola indiginella**
- Leafhoppers**
Lovett, Oreg. Coll. B. 91, 10, 1913.
Osborn, U. S. B. 108, 1912.
Smith, N. J. B. 181, 9, 1905.
- Leafhoppers in alfalfa**
Dean, Kans. Agr. Educ. I, 4, 79, 1909.
- Leafhoppers in corn**
Forbes, Ill. Ent. R. 23, 121, 1905.
- Leaf-mining locust beetle**, *see* **Odontota dorsalis**
- Leather jacket**, *see* **Tipula**
- Lebia grandis**
Britton, Conn. R. 8, 844, 1909.
Chittenden, U. S. C. 87, 10, 1907.
Felt, N. Y. St. Mus. Mem. 8, 690, 1906.
Fletcher, Farm Advocate, Can., 1906, 1219.
Popenoe, U. S. B. 82, 4, 1909.
- Lecanium**, *see* **Eulecanium**
- Lecanium hesperidum**, *see* **Coccus**
- Lecanium longulum**, *see* **Coccus**
- Lecanium oleae**, *see* **Saissetia**
- Lecanobius cockerelli**
Vosler, Cal. Hort. B. II, 12, 770, 1913.
- Lee's Insect Destroyer**
——— U. S. D. A. Ins. & Fung. No. 100, 1913.
- Lee's Lice Killer**
——— U. S. D. A. Ins. & Fung. Bd., Ins. 5, p. 75, 1914.
- Legislation**
Brittain, Agr. Gaz. Can., Oct. '14, 810.
Felt, J. Ec. Ent. II, 342, 1909.
Gillette, Colo. Bd. Hort. R. f., '09, 117.
Gourley, N. H. Hort. Soc., 1914, 63.
Herms, Cal. B. 215, 541, 1911.
Hewitt, J. Ec. Ent. IV, 358, 1911.
Howard & Burgess, U. S. B. 61, 9, 1906.
Hunter, J. Ec. Ent. V, 207, 1912.
Sanderson, U. S. B. 60, 95, 1906.
Sherman, N. C. Crop Pest C. 8, 1905.
Woodworth, Cal. Cult. XXXVII, 54, '11.
——— Cal. Hort. Comm., 1905.
——— Ga. Bd. Ent. B. 37, 3, 1912.
——— J. Ec. Ent. III, 275, 1910.
——— J. Ec. Ent. IV, 278, 1911.
——— Me. Pom. Soc., 1904-1905, 137.
——— Mont. B. 98, 133, 1914.
——— N. Y. Dept. Agr. B. 27, 1048, '11.
——— Ohio Hort. Soc., 1911, 65.
——— S. D. Hort. Soc. 2nd R. 93, 1905.
——— Tenn. Dept. Agr. Bien. R., 1905-1906, 161.
——— Tenn. Dept. Agr. Bien. R., 1907-1908, 26.
——— Wyo. Bd. Hort. 1st Bien. R. 10, 1905-1906.
- Legislation, crop pest law**
Hewitt, Can. Hort. XXXIII, 172, 1910.
Hewitt, Can. Exp. Farms Ent. B. 1, 5, 1911.
Hewitt, Can. Exp. Farms. Ent. B. 6, 6, 1912.
——— Ga. Bd. Ent. B. 20, II, 181, 1906.
——— La. Crop Pest Comm. C. 17, 3, 1907.
——— La. Crop Pest Comm. C. 32, 225, 1909.
——— Miss. C. (Unnumbered), June 1908.
——— Va. Crop Pest Comm. C. 3, n. s., 3, 1907.
——— W. Va. Crop Pest Comm. B. 1, 3, 1913.

Legislation, insecticide

- Cooley, Mont. B. 88, 98, 1912.
 Kellogg, Pa. Dept. Agr. B. 192, 10, '10.
 Morgan, Tenn. Bd. Ent. R. f. 1910, 31.
 Sanderson, N. H. Hort. Soc., 1908, 47.
 Sanderson, Me. Pom. Soc., 1908-'09, 129.
 Woodworth, Cal. B. 182, 184, 1906.
 Woodworth, Cal. C. 65, 1911.
 Woodworth, Cal. C. 104, 1913.
 — Cal. Fr. Grow., Aug. 23, '13, 5.
 — C. Gentl., 1908, 1202.
 — C. Gentl., 1909, 1166.
 — Iowa Home., Feb. 23, 1911, 491.
 — N. Y. Dept. Agr. B. 11, 50c, '09.
 — N. Y. Dept. Agr. B. 27, 1019, '11.
 — Pac. Rur. Press, LXXXI, 12, '11.
 — Va. Hort. Soc. 15th R. 273, 1911.
 — Wis. B. 227, 36, 1912.

Legislation, inspection

- Becker, Ark. C. 17, 1913.
 Burgess, U. S. C. 75, 1906.
 Burgess, Ohio Nurs. Orch. Insp. R. 5, 26, 1907.
 Caesar, Ont. Agr. Coll. B. 219, 24, 1914.
 Cook, Cal. Hort. Comm. Statutes, 5, '12.
 Cook, Cal. Hort. B. II, 5, 542, 1913.
 Dixon, Tex. Dept. Agr. B. 1, 21, 1907.
 Essig, Cal. Cult. XXXV, 532, 1910.
 Gillette, Colo. R. Bd. Hort. f., '09, 117.
 Gillette, Colo. C. 2, Jan. 1912.
 Henry, Wash. Hort. Assoc., 7th R. 189, 1911.
 Moore, Wis. R. 24, 369, 1907.
 Sanborn, J. Ec. Ent. III, 82, 1910.
 Sanders, Wis. B. 227, 4, 1912.
 Smith, N. J. Bd. Agr. R. 36, 156, 1909.
 Taft, Mich. Hort. Soc., 1905-1906, 89, 1907.
 Washburn, Minn. Ent. R. 11, 26, 1906.
 Washburn, Minn. R. 15, 28, 1914.
 White, Colo. Bd. Hort. R. f. 1909, 139.
 — Colo. Bd. Hort. R. f. 1904, 111, 1905.
 — Colo. Bd. Hort. R. f. 1905, 146, 1906.
 — Colo. Bd. Hort. R. f. 1906, 118, 1907.
 — Colo. Bd. Hort. R. f. 1907, 118, 1908.
 — Colo. Bd. Hort. R. f. '08, 86, '09.
 — Colo. Bd. Hort. R. f. 1909, 139, 1910.

- Colo. Bd. Hort. R. f. '10, 217, '11.
 — Colo. C. 1, Apr. 1910.
 — Me. Comm. Agr. R. 1905, 20, '06.
 — Me. Dept. Agr. Quart. B., vol. IV, 4, 125, 1905.
 — Minn. Hort. Soc., 1914, 359.
 — Mo. C. 63, 216, 1913.
 — Nebr. Hort. Soc., 1913, 197.
 — Nebr. Ent. B. 2, 2, 1913.
 — N. H. Bd. Agr. R., '05-'07, xvii.
 — N. Mex. B. 68, 60, 1906.
 — N. Mex. B. 68, 60, 1908.
 — N. Y. Dept. Agr. B. 11, 75c, '09.
 — N. Y. Dept. Agr. B. 20, 3, '10.
 — Ohio Bd. Agr. R. 60, 618, 1905.
 — Ohio Bd. Agr. R. 61, 666, 1906.
 — Ohio Nurs. Orch. Insp. R. 4, 22, 1906.
 — Okla. Bien. R. pt. III, 17, 1908.
 — Okla. B. 79, 86, 1908.
 — Oreg. Bd. Hort. 8th Bien. R. 77.
 — Oreg. Bd. Hort. 9th Bien. R. 107.
 — Oreg. Bd. Hort. 10th Bien. R., 126.
 — Oreg. Bd. Hort. 11th Bien. R. 158.
 — Pac. Rur. Press, LXXVII, 250, 1909.
 — Pr. Ark. Hort. Soc., 1910, 214.
 — R. I. Bd. Agr. R. 20, 24, 1905.
 — R. I. Bd. Agr. R. 21, 22, 1906.
 — R. I. Bd. Agr. R. 22, 123, 1907.
 — R. I. Bd. Agr. R. 23, 85, 1908.
 — R. I. Bd. Agr. R. 24, 89, 1909.
 — S. C. C. 14, 1913.
 — S. D. Hort. Soc. 4th R., 243, '07.
 — S. D. Hort. Soc. 6th R., 60, '09.
 — Tenn. Bd. Ent. B. 2, 18, 1905.
 — Tex. Dept. Agr. B. 6, 22, 1908.
 — Utah, Bd. Hort. Bien. R. f. 1903-1904, 49, 1905.
 — Wash. Comm. Hort. 6th R. 17, 1909.
 — W. Va. Crop Pest Comm. B. 1, 4, 1913.
 — Wis. B. 227, 32, 1912.
 — Wyo. Bd. Hort. 1st. Bien. R. 5, 1905-1906.
 — Wyo. Bd. Hort. 2nd. Bien. R. 11, 1907-1908.
 — Wyo. Bd. Hort. 3rd Bien. R. 15, 1909-1910.

Legislation, quarantine

Armstrong, Cal. Cult., XXXVII, 126, 1911.

Armstrong, Pac. Rur. Press, LXXXII, 45, 1911.

Conradi, J. Ec. Ent. IV, 267, 1911.

Cundiff, Cal. Fr. Grow., Feb. 10, '12, 4.

Cundiff, Cal. Cult., XXXVIII, 3, 1912.

Cundiff, Pac. Rur. Press, LXXXIII, 32, 1912.

Essig, Cal. Hort. B. I, 6, 240, 1912.

Essig, Cal. Hort. B. I, 11, 886, 1912.

Hewitt, Can. Exp. Farms Ent. B. 6, 19, 1912.

Maskew, Cal. Hort. I, 1, 49, 1912.

Maskew, Cal. Hort. B. I, 12, 923, 1912.

Maskew & Dutton, Cal. Hort., B. I, 12, 902, 1912.

Morgan, Tenn. Bd. Ent. R. f., 1908, 44.

Roeding, Cal. Hort. B. II, 3-4, 364, '13.

Severin, S. D. Hort. Soc. 10th R., 93, 1913.

Taft, Mich. R. 26, 129, 1913.

Wilson, U. S. D. A. Off. Sec'y, C. 37, '11.

—— Cal. Fr. Grow., Jan. 20, 1912, 4.

—— Cal. Hort. B. I, 2, 42, 1912.

—— Cal. Hort. I, 2, 50, 1912.

—— Cal. Hort. B. I, 10, 791, 1912.

—— Cal. Hort. B. II, 1-2, 337, 1913.

—— Me. Ent. R. 3, 24, 1908.

—— Me. Comm. Agr. R., 1907, 228, 1908.

—— Mont. B. 98, 128, 1914.

—— Pr. Ent. Soc. B. C. 2, 53, 1912.

—— Tenn. Bd. Ent. f. 1907, 46.

—— Tenn. Dept. Agr. Bien. R., 1907-1908, 35.

—— Tenn. Bd. Ent. R. f. 1909, 32.

—— Tenn. Bd. Ent. R. f. 1910, 63.

—— Tenn. Dept. Agr. Bien. R., 1909-1910, 60.

—— Tenn. Bd. Ent. B. 6, 63, 1912.

Legislation, quarantine, see also Quarantine**Legislation, spraying**

Baker, Md. Hort. Soc., 1908, 128, 1909.

—— Cal. Hort. B. I, 10, 800, 1912.

—— Colo. Bd. Hort. R. f., 1909, 95, 1910.

—— Farm. Guide, Apr. 18, 1914, 8.

Lema trilineata

Bentley, Tenn. Bd. Ent. R. f. 1913, 30.

Bethune, Ont. Agr. Coll. B. 171, 32, '09.

Britton, Conn. R. 8, 844, 1909.

O'Kane, Inj. Ins. 146, 1914.

Sanderson, Ins. Pests, 303, 1912.

Smith, N. C. B. 197, 51, 1908.

Symons, Md. B. 101, 175, 1905.

Lentil weevil, see Bruchus lentis

Leopard moth, see Zeuzera pyrina

Lepidocyrtus americanus

Herrick, Household Ins. 378, 1914.

Lepidoplatys squamiger

Quayle, Cal. B. 178, 41, 1906.

Lepidosaphes beckii

Allen, Leffingwell & Chapman, Cal. Cult., XXIV, 351, 1905.

Barre & Conradi, S. C. B. 141, 40, 1909.

Bemis, Cal. Cult., XXV, 463, 1905.

Berger, Fla. B. xxxix, 1910.

Britton, Conn. R. 5, 244, 1906.

Carnes, Cal. Hort. Comm. Bien. R. 2, 217, 1907.

Chapman, Claremont (Cal.) Pom. Club B. 2, 4, 1909.

Coit, Ariz. B. 58, 318, 1908.

Conradi, S. C. R. 24, 59, 1911.

Cook, Cal. Cult., XXIV, 385, 1905.

Day, Cal. Cult. XXV, 223, 1905.

Douglass, Ind. Ent. R. 4, 221, 1912.

Essig, Claremont (Cal.) Pom. Club B. 2, 5, 1909.

Essig, Ventura Co. (Cal.) Hort. Comm. B. 2, 1911.

Essig, Cal. Hort. B. II, 1-2, 136, 1913.

Fawcett & Berger, Fla. Fr. Grow., May 18, 1914, 4.

Jeffrey, Cal. Hort. Comm. Bien. R. 2, 283, 1907.

Maskew, U. S. B. 54, 75, 1905.

Morrill, U. S. B. 76, 61, 1908.

Morrill, Cal. Cult., XLI, 102, 1913.

Pease, Cal. Cult., XXX, 572, 1908.

Quayle, Cal. B. 214, 466, 1911.

Quayle, J. Ec. Ent. IV, 301, 513, 1911.

Quayle, Cal. B. 226, 319, 1912.

Quayle, U. S. D. A. B. 134, 17, 1914.

Rosenfeld, La. Hort. Soc., 1908, 116.

Watson, Fla. Fr. Grow. Mar. 16, '12, 10.

Watson, Fla. R., 1912, li.

Watson, Fla. B. 123, 4, 1914.

Williams, Ala. Poly. Ins. B. 157, 662, '11.

Woglum, U. S. B. 79, 11, 1909.

Woglum, U. S. B. 90, 8, 1912.

- Yothers, U. S. C. 168, 7, 1913.
 ——— Rur. Cal., Mar. 1905, 102.
 ——— S. W. Stockm., Mar. 5, 1909, 3.
 ——— U. S. Y. B., 1906, 513.
 ——— U. S. Y. B., 1908, 577.
- Lepidosaphes beckii**, *quarantine*
 Cook, Cal. Hort. Comm. Statutes, 1912, 25.
- Lepidosaphes gloveri**
 Essig, Pom. Jr. Ent. III, 406, 1911.
 Essig, Cal. Hort. B. II, 1-2, 138, 1913.
 Quayle, U. S. D. A. B. 134, 18, 1911.
 ——— U. S. Y. B., 1908, 577.
- Lepidosaphes ulmi**
 Alderman, Giddings & Rumsey, W. Va. C. 7, 31, 1913.
 Bailey, Vt. Agr. R. 5, 27, 1913.
 Baldwin, Ind. Ent. R. 5, 76, 1912.
 Barre & Conradi, S. C. B. 141, 23, 1909.
 Beach, Iowa B. 127, 56, 1912.
 Bentley, Tenn. B. v. XIX, 2, 32, 1906.
 Bentley, Tenn. Bd. Ent. R. f. 1913, 23.
 Bethune, Ont. Agr. Coll. B. 158, 14, '07.
 Bethune, Ont. Agr. Coll. R. 32, 45, 48, 1907.
 Bethune, Ont. Agr. Coll. R. 33, 58, '08.
 Bethune, Ont. Agr. Coll. R. 34, 31, 1909.
 Bethune, Ont. Agr. Coll. R. 35, 33, 1910.
 Brittain, Pr. Ent. Soc. B. C. 4, 15, 1914.
 Britton, Conn. B. 151, 15, 1905.
 Britton, Conn. R. 5, 245, 1906.
 Buckley, Me. Dept. Agr. B. vol. X, 3, 4, 1911.
 Burgess, U. S. B. 60, 74, 1906.
 Caesar, Ont. Agr. Coll. B. 177, 50, 1909.
 Caesar, Ont. Ent. Soc. R. 41, 23, 1911.
 Caesar, Ont. Agr. Coll. B. 198, 20, 1912.
 Caesar, Ont. Ent. Soc. R. 42, 28, 1912.
 Caesar, Ont. Agr. Coll. B. 219, 26, 1914.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 220, 1907.
 Chandler, Mo. Hort. Soc., 1909, 354.
 Chandler, Mo. B. 102, 249, 1912.
 Clarke, Rur. Cal., Aug. 1907, 293.
 Conradi & Thomas, S. C. B. 143, 30, '09.
 Cooley, Mont. B. 64, 44, 1906.
 Cooley, Mont. B. 71, 148, 1908.
 Cooley, Mont. Bd. Hort. R. f. '09-'10, 32.
 Cooley, J. Ec. Ent. III, 57, 1910.
 Cooley, Mont. B. 92, 58, 1912.
 Cooley, Mont. B. 98, 125, 1914.
 Cooley & Swingle, Mont. C. 17, 129, '12.
- Cunningham, Pr. Ent. Soc. B. C., 1, 16, 1911.
 Davis, J. Ec. Ent. III, 186, 1910.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 39, 1913.
 Doten, Nev. B. 73- $\frac{1}{2}$, 41, 1910.
 Doten, Nev. B. 72, 34, 1909.
 Douglass, Ind. Ent. R. 1, 78, 1908.
 Douglass, Ind. Ent. R. 3, 105, 1910.
 Douglass, Ind. Ent. R. 4, 222, 1912.
 Essig, Cal. Hort. B. II, 1-2, 138, 1913.
 Faurot, Mo. Fr. Exp. Sta. B. 23, 29, '12.
 Felt, N. Y. St. Mus. Mem. 8, 211, 1905.
 Felt, Gard. Mag., Jan. 1906, 270.
 Felt, C. Gentl., 1907, 552.
 Felt, N. Y. R. 25, 92, 1910.
 Felt, Mass. Fr. Grow. Assoc. R. 12-16, 10, 1910.
 Fernald, Mass. R. 22, II, 72, 1910.
 Fernald, Mass. Bd. Agr. C. 6, 7, 1913.
 Forbes, Ill. B. 151, 519, 1911.
 Forbes, Ill. Ent. R. 26, 57, 1911.
 Fulton, Wright & Gregg, Pa. B. 110, 16, 1911.
 Funk, Pa. Dept. Agr. B. 152, 211, 1907.
 Gahan, Md. Hort. Soc., 1905, 80, 1906.
 Garman, Ky. B. 133, 54, 1908.
 Gee, Prog. Farm., 1912, 304.
 Gibson, Ont. Ent. Soc. R. 36, 114, 1906.
 Gibson, Ont. Ent. Soc. R. 43, 19, 1913.
 Gillette, Colo. B. 114, 15, 1906.
 Gillette, Colo. R. 19, 143, 1906.
 Gossard, Ohio B. 164, 12, 1905.
 Gossard, Ohio B. 198, 51, 1908.
 Gossard, Ohio B. 233, 108, 1911.
 Haseman, Mo. Hort. Soc., 1911, 229.
 Hitchings, Me. Comm. Agr. R., 1906, 207, 1907.
 Hitchings, Me. Ent. R. 2, 37, 1907.
 Hitchings, Me. Comm. Agr. R., 1907, 301, 1908.
 Hitchings, Me. Dept. Agr. Quart. B. vol. VII, 132, 1908.
 Hitchings, Me. Ent. R. 3, 97, 1908.
 Hitchings, Me. Ent. R. 5, 8, 1910.
 Houghton, Del. C. 3, 1907.
 Houser, Ohio B. 194, 173, 1908.
 Houser, Ohio C. 143, 56, 1914.
 Hoyt, Mich. Farm., Apr. 13, 1907, v. 51, p. 415.
 Jarvis, Can. Ent., 1906, 289.
 Jarvis, Ont. Ent. Soc. R. 37, 51, 111, '07.

Lepidosaphes ulmi (*Cont'd*)

- Jarvis, Ont. Ent. Soc. R. 38, 68, 1908.
 Jarvis, Conn. Storrs B. 56, 241, 1909.
 Johannsen, Me. B. 207, 437, 1912.
 Johannsen & Patch, Me. Comm. Agr.
 R. f. 1910, 329.
 Kelsall, Farm & Dairy, Can., Mar. 6,
 1913, 14.
 Lamson, Conn. Storrs B. 71, 64, 1912.
 Lochhead, Ont. Agr. Coll. B. 144, 30,
 1905.
 Lochhead, Can. Hort. XXX, 53, 1907.
 Lochhead, Ont. Ent. Soc. R. 40, 68, '10.
 Lochhead, Ont. Ent. Soc. R. 41, 13, '11.
 Lochhead, Syn. Ec. Ent. 41, 1914.
 Moore, Wis. R. 23, 233, 1906.
 Moore, Wis. R. 24, 372, 1907.
 Moore, Wis. B. 190, 5, 1910.
 Moore, Wis. B. 207, 27, 1911.
 Munson, Me. Dept. Agr. Quart. B. vol.
 IV, 1, 14, 1905.
 Munson, Me. B. 128, 68, 1906.
 Neillie, J. Ec. Ent. III, 319, 1910.
 O'Kane, Inj. Ins. 258, 1914.
 Parrott, N. Y. Dept. Agr. B. 50, 1736,
 1913.
 Price, Va. C. 7, 24, 1909.
 Quaintance & Sasser, U. S. C. 121, 2,
 1910.
 Reeves, Ont. Dept. Agr. Fr. B. 212, 8,
 1913.
 Ruggles & Stakman, Minn. B. 121, 13,
 1911.
 Rumsey & Brooks, W. Va. R. f., 1907-
 1908, 22.
 Rumsey & Brooks, W. Va. B. 116, 242,
 1908.
 Sanders, Wis. B. 227, 15, 1912.
 Sanderson, N. H. R. 17-18, 338, 1906.
 Sanderson, N. H. C. 4, 1908.
 Sanderson, Ins. Pests, 592, 1912.
 Severin, S. D. Hort. Soc. 8th R., 354, '11.
 Sherman, N. C. Dept. Agr. B. June,
 1912, 18.
 Sherman, N. C. Dept. Agr. B. 34, 6, 5,
 1913.
 Slingerland, N. Y. Fr. Grow. Assoc., '08,
 19.
 Slingerland & Crosby, N. Y. C. B. 252,
 339, 1908.
 Slingerland & Crosby, Man. Fr. Ins.
 171, 1914.
 Slingerland, Herrick & Crosby, N. Y. C.
 B. 283, 469, 1910.
 Smith, N. J. B. 181, 17, 1905.
 Smith, N. J. Ent. C. 20.
 Smith, N. J. R., 1905, 535.
 Smith, Ga. Bd. Ent. B. 20, 167, 1906.
 Smith, N. J. R., 1907, 423.
 Smith, U. S. B. 67, 36, 1907.
 Smith, Nebr. Hort. Soc. B. 20, 5, 1908.
 Smith, N. C. B. 206, 62, 1910.
 Smith, N. J. R., 1911, 424.
 Smith & Lewis, U. S. B. 60, 79, 1906.
 Somes, Mo. Fr. Exp. Sta. Bien. R.,
 1913-1914, 18.
 Spalding, Rur. N. Y., 1910, 566.
 Stene, R. I. Bd. Agr. R. 21, 42, 1906.
 Stene, R. I. Nurs. Insp., 1906, 26.
 Stuart, Vt. R. 18, 311, 1905.
 Stuart, Vt. R. 19, 293, 1907.
 Summers, Iowa Home, Feb. 3, 1910, 270.
 Surface, Pa. D. A. Zoöl. B. III, 2, 47, '05.
 Surface, Pa. D. A. Zoöl. IV, 3, 83, 1906.
 Surface, Pa. Dept. Agr. R. 12, 437, '06.
 Surface, Pa. D. A. Zoöl. V, 12, 370, '08.
 Surface, Pa. D. A. Zoöl. VII, 2, 47, '09.
 Surface, C. Gentl., 1910, 446.
 Surface, Pa. R. 16, 116, 1910.
 Surface, Pa. Dept. Agr. R. 16, 116, '10.
 Surface, Pa. D. A. Zoöl. I, 1, 15, 1911.
 Swaine, Ont. Ent. Soc. R. 41, 94, 1911.
 Swaine, Ont. Ent. Soc. R. 42, 72, 1912.
 Symons, Md. B. 101, 134, 1905.
 Symons, Md. B. 111, 57, 1906.
 Symons, U. S. B. 60, 83, 1906.
 Symons, Am. Agric., Mar. 26, 1910, 489.
 Symons & Gahan, Md. Hort. Soc., 1904,
 34, 1905.
 Taylor, Mo. Fr. Exp. Sta. B. 18, 75, '08.
 Treherne, Pr. Ent. Soc. B. C. 4, 24, '14.
 Troop, Ind. B. 102, 253, 1905.
 Van Aken, Amer. Cult., May 23, '08, 11.
 Van Aken, Col. Rur. World, May 6,
 1908, 147.
 Van Buren & Husted, N. Y. Dept. Agr.
 B. 24, 478, 1911.
 Walden, The Ranch, June 1, 1910, 4.
 Washburn, Minn. Ent. R. 13, 98, '10.
 Webster, J. Ec. Ent. IV, 524, 1911.
 Webster, J. Ec. Ent. V, 470, 1912.
 Weiss, N. J. R. 1912, 432.
 Weiss & Patterson, N. J. C. 15, 22, '12.
 Welden, J. Ec. Ent. I, 146, 1908.

Lepidosaphes ulmi (*Cont'd*)

- Whiteside, Mont. Bd. Hort. f. 1905-1906, 33, 1907.
 Whiteside, Mont. Bd. Hort. f. 1907-1908, 29, 1909.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 147.
 Worsham, J. Ec. Ent. II, 206, 1909.
 Young, Pr. Columbus Hort. Soc., '06, 74.
 ——— C. Gentl., 1905, 956.
 ——— C. Gentl., 1906, 872, 1067.
 ——— C. Gentl., 1907, 434.
 ——— C. Gentl., 1908, 686.
 ——— Farm. Advocate, Can., '12, 141.
 ——— Farm. World, Can., 1907, 503.
 ——— Mich. Farm. May 6, 1905, 458.
 ——— Mont. Bd. Hort. f., 1903-1904, 95, 1905.
 ——— Rur. N. Y., 1906, 350.
 ——— Rur. N. Y., 1909, 472.
 ——— Rur. N. Y., 1910, 493.
 ——— Rur. N. Y., 1911, 60.
 ——— U. S. Y. B., 1905, 635.
 ——— U. S. Y. B., 1906, 513.
 ——— U. S. Y. B., 1907, 548, 551.

Lepidosaphes ulmi, *eggs*

Girault, Ent. News, 1909, 356.

Lepidosaphes ulmi, *parasites*

Ewing, Psyche, 1912, 121.

Lepisma domestica

- Dean, Kans. B. 189, 235, 1913.
 Dietz, Ind. Ent. R. 5, 192, 1912.
 Felt, N. Y. St. Mus. B. 129, 28, 1909.
 Felt, N. Y. St. Mus. B. 136, 33, 1912.
 Herrick, Household Ins. 217, 1914.
 Morrill, S. W. Stockm., July 3, 1914, 10.
 Smith, N. J. B. 203, 42, 1907.

Lepisma saccharina

- Dean, Kans. B. 189, 235, 1913.
 Dietz, Ind. Ent. R. 5, 192, 1912.
 Garman, U. S. B. 60, 174, 1906.
 Herrick, Household Ins. 214, 1914.
 Hitchings, Me. Ent. R. 4, 5, 1909.
 O'Kane, Inj. Ins. 357, 1914.
 Surface, Pa. D. A. Zoöl. III, 1, 20, 1913.

Lepisma sp.

- Washburn, Minn. R. 11, 71, 1906.
 Washburn, Minn. R. 14, 86, 1912.
 Whitmarsh, Ohio B. 253, 133, 1912.

Lepinotarsa decemlineata

- Aldrich, J. Ec. Ent. II, 235, 1909.
 Aldrich, The Ranch, Oct. 15, 1909, 14.

Barre & Conradi, S. C. B. 141, 35, 46, 1909.

- Bennett, Rur. N. Y., 1909, 882.
 Bethune, Ont. Agr. Coll. B. 171, 31, '09.
 Bliss, Or. Judd Farm., June 22, '12, 845.
 Britton, Conn. R. 4, 212, 1905.
 Caesar, Farm. Advocate, Can., '10, 830.
 Caesar, Ont. Ent. Soc. R. 43, 82, 1913.
 Cardiff, Wash. B. 118, 14, 1914.
 Chandler, Mo. B. 102, 266, 1912.
 Chittenden, Am. Agr., July 13, 1907, 24.
 Chittenden, Ins. Inj. Veg. 214, 1907.
 Chittenden, Or. Judd Farm., July 13, 1907, 24.
 Chittenden, U. S. C. 87, 1, 1907.
 Chittenden, J. Ec. Ent. VII, 152, 1914.
 Conradi, Tex. B. 89, 33, 1907.
 Cooley, J. Ec. Ent. III, 178, 1910.
 Cooley, Mont. B. 92, 61, 1912.
 Cooley, Mont. B. 98, 127, 1914.
 Corbett, U. S. F. B. 407, 17, 1910.
 Criddle, J. Ec. Ent. IV, 239, 1911.
 Criddle, J. Ec. Ent. V, 250, 1912.
 Culbertson, Amer. Cult., June 17, '05, 1.
 Davis, Ill. Ent. R. 26, 141, 1911.
 Dickens, Kans. B. 194, 486, 1914.
 Douglass, Ind. Ent. R. 2, 80, 1910.
 Fletcher, Can. Exp. Farms B. 52, 39, '05.
 Fulton, Wright & Gregg, Pa. B. 110, 34, 1911.
 Garcia, N. Mex. B. 68, 12, 1908.
 Gibson, Ont. Ent. Soc. R. 36, 117, 1906.
 Gibson, Can. Hort. XXXII, 153, 1909.
 Girault, Psyche, 1907, 45.
 Girault, Ann. Ent. Soc. Am. I, 155, '08.
 Girault, Ann. Ent. Soc. Am. IV, 71, '11.
 Greiner, Farm & Fireside, June 15, 1906, 6.
 Hanson, Farm. Guide, May 31, 1913, 6.
 Hecke, Cal. Hort. B. III, 12, 534, 1914.
 Jarvis, Conn. Storrs B. 56, 264, 1909.
 Johnson, Colo. Bd. Hort. R. f. 1904, 70, 1905.
 Johnson, Amer. Cult., May 21, 1910, 1.
 Johnson, Colo. Fr. Grow., Sept. '10, 13.
 Johnson, C. Gentl., 1910, 661.
 Johnson, Farm. Guide, May 28, 1910, 9.
 Johnson, Farm. Guide, Aug. 13, 1910, 7.
 Johnson, Nebr. Farm., July 13, '10, 628.
 Johnson, Or. Judd Farm., July 23, 1910, 76.
 Johnston, U. S. B. 109, 53, 1912.

- Kirkland, Me. Dept. Agr. Quart. B., vol. IV, 1, 10, 1905.
- Kohler, Minn. B. 118, 120, 1910.
- Lane, Ala. Dept. Agr. (sep.) (no date).
- Lewis, Pr. Ga. Hort. Soc. f. 1912, 10.
- Lochhead, Syn. Ec. Ent. 73, 1914.
- Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 23, 1906.
- Morrill, S. W. Stockm., Aug. 15, '13, 10.
- Morse, Me. B. 149, 329, 1907.
- Moulton, Pac. Rur. Press, LXXXII, 7, 1911.
- Newell, Proc. La. Agr. Soc. 18, 47, 1905.
- Newell, La. Hort. Soc., 1908, 47.
- Newell & Rosenfeld, J. Ec. Ent. I, 153, 1908.
- Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 101, 1909.
- O'Kane, Inj. Ins. 145, 1914.
- Patch, Me. B. 134, 213, 1906.
- Pettit, Mich. B. 233, 196, 1906.
- Popenoe, U. S. B. 82, 1, 1909.
- Price, Va. C. 7, 65, 1909.
- Rogers, Pa. Dept. Agr. B. 190, 53, '10.
- Ruggles & Stakman, Minn. B. 121, 27, 1911.
- Sanborn, Okla. B. 100, 46, 1912.
- Sanderson, Ins. Pests, 291, 1912.
- Sandsten & Milward, Wis. B. 168, 19, 1908.
- Sellards, Fla. R., 1905, 21.
- Shaw, Or. Judd Farm., May 14, 1910, 820.
- Sherman, Ont. Ent. Soc. R. 36, 21, 1906.
- Slingerland & Crosby, N. Y. C. B. 252, 344, 1908.
- Slingerland, Herrick & Crosby, N. Y. C. B. 283, 474, 1910.
- Smith, Ga. Bd. Ent. B. 16, 47, 1905.
- Smith, N. C. B. 197, 49, 1908.
- Smith & Lewis, U. S. B. 60, 82, 1906.
- Stene, R. I. Bd. Agr. R. 22, 179, 1907.
- Stewart, French & Sirrine, N. Y. St. B. 338, 115, 1911.
- Surface, Pa. D. A. Zoöl. V, 12, 396, '08.
- Surface, Pa. Dept. Agr. R. 14, 355, '08.
- Swenk, Nebr. Bd. Agr. R. f. 1910, 368.
- Symons, Md. B. 101, 174, 1905.
- Treherne, Ont. Ent. Soc. R. 43, 111, '13.
- Walden, Conn. R. 11, 311, 1912.
- Watson, Fla. B. 112, 39, 1912.
- Watson, Fla. B. 125, 78, 1914.
- Webster, J. Ec. Ent. III, 503, 1910.
- Wilson, Oreg. Bien. Crop Pest. R. f. 1911-1912, 172.
- Woods, Mass. Crop R. f. 1908, 37.
- Worsham, J. Ec. Ent. II, 209, 1909.
- Yothers, Cal. Cult., XLI, 104, 1913.
- Young, Ont. Ent. Soc. R. 35, 4, 1905.
- Young, Ont. Ent. Soc. R. 38, 23, 1908.
- Farm. Advocate, Can., '11, 1022.
- Rur. N. Y., 1905, 19.
- U. S. Y. B., 1907, 545.
- U. S. Y. B., 1908, 572.
- Leptinotarsa decemlineata, *enemies***
Chittenden, U. S. B. 82, 85, 1910.
- Leptobyrsa explanata**
Britton, Conn. R. 10, 708, 1911.
- Felt, N. Y. R. 25, 72, 1910.
- Leptocoris trivittatus**
Baldwin, Farm. Guide, Nov. 29, '13, 9.
- Baldwin, Ind. Ent. R. 6, 27, 1914.
- Cooper, Cal. Hort. Comm. Ins. & Insect. 1905, 20.
- Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 119, 1905.
- Erwin, Iowa Home., Mar. 1, 1906, 394.
- Felt, N. Y. St. Mus. Mem. 8, 239, '05.
- Gossard, Ohio Hort. Soc., 1914, 110.
- Milliken, Kans. Farm., Nov. 11, '11, 11.
- Leptoglossus oppositus**
Forbes, Ill. Ent. R. 23, 197, 1905.
- Hinds, U. S. B. 59, 29, 1906.
- Morrill, U. S. B. 86, 90, 1910.
- Sanderson, U. S. F. B. 223, 21, 1905.
- Sanderson, U. S. B. 57, 47, 1906.
- Smith, N. C. B. 205, 22, 1910.
- Leptoglossus phyllopus**
Conradi, Tex. B. 89, 43, 1907.
- Forbes, Ill. Ent. R. 23, 197, 1905.
- Hinds, U. S. B. 59, 29, 1906.
- Morrill, U. S. B. 86, 88, 1910.
- Sample, Fla. Fr. Prod. News, Sept. 30, 1910, 2.
- Sanderson, U. S. F. B. 223, 21, 1905.
- Slingerland & Crosby, Man. Fr. Ins. 379, 1914.
- Smith, N. C. B. 205, 21, 1910.
- Watson, Fla. B. 112, 38, 1912.
- U. S. Y. B., 1907, 545.
- Leptoglossus zonatus**
Cockerell, Ent. News, 1905, 18.
- Coit, Ariz. B. 58, 322, 1908.
- Hinds, U. S. B. 59, 29, 1906.

- Morrill, U. S. B. 54, 32, 1905.
 Morrill, U. S. B. 86, 91, 1910.
 Morrill, J. Ec. Ent. VI, 190, 1913.
 ——— S. W. Stockm., Mar. 5, 1909, 7.
- Leptostylus aculiferus**
 Felt, N. Y. St. Mus. Mem. 8, 461, '06.
 Slingerland & Crosby, Man. Fr. Ins. 194, 1914.
- Leptostylus maculata**
 Anderson & Rankin, N. Y. C. B. 347, 586, 1914.
 Felt, N. Y. St. Mus. Mem. 8, 482, '06.
- Leptoterna dolabrata**
 Patch, Me. B. 162, 363, 1908.
- Leptothrips floridensis**
 Watson, Fla. R., 1913, lxxv.
- Leptotrachelus dorsalis**
 Webster, U. S. C. 66 Rev. Ed. 4, 1908.
 Webster, U. S. C. 106, 10, 1909.
- Leptura canadensis**
 Felt, N. Y. St. Mus. Mem. 8, 670, 1906.
 Johannsen, Me. B. 207, 463, 1912.
- Leptura subhamata**
 Felt, N. Y. St. Mus. Mem. 8, 675, 1906.
- Leptura vagans**
 Felt, N. Y. St. Mus. Mem. 8, 440, 1906.
- Leptura zebra**
 Felt, N. Y. St. Mus. Mem. 8, 450, 1906.
 Fernald, J. Ec. Ent. V, 247, 1912.
 Fernald, Mass. R. 24, I, 83, 1912.
 Fernald, Mass. R. 25, II, 87, 1913.
- Lepturges querci**
 Felt, N. Y. St. Mus. Mem. 8, 439, 1906.
- Leptus americanus**
 Chittenden, U. S. C. 77, 4, 1906.
 Law, U. S. B. An. I. R., 1907, 453.
- Leptus autumnalis**
 Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 144, 1911.
- Leptus irritans**
 Chittenden, U. S. C. 77, 1, 1906.
 Gossard, O. Farm., Nov. 14, 1908, 399.
 Gossard, Farm. Guide, July 24, 1909, 3.
 Hirschberg, Farm. Guide, Aug. 23, 1913, 9.
 Washburn, Minn. Ent. R. 12, 156, 1908.
- Leptus sp.**
 Chittenden, J. Ec. Ent. VII, 152, 1914.
 Gossard, Ohio P. B. 304, 1909.
- Leptus sp. on chickens**
 Herrick, J. Ec. Ent. II, 341, 1909.
- Lerema accius**
 Forbes, Ill. Ent. R. 23, 166, 1905.
- Lesser apple leaf-folder, see *Acleris minuta***
- Lesser apple worm, see *Enarmonia prunivora***
- Lesser clover leaf-weevil, see *Phytonomus nigrirostris***
- "Lesser locust," see *Melanoplus atlanis***
- Lesser migratory grasshopper, see *Melanoplus atlanis***
- Lesser peach-borer, see *Synanthedon pictipes***
- Lesser pine-borer, see *Asemum moestum***
- Lesser prionus, see *Orthosoma brunneum***
- Lesser shot-borer, see *Xyleborus xylographus***
- Lesser sugar-beet leaf-beetle, see *Monoxia consputa***
- Lesser wheat-straw maggot, see *Oscinis carbonaria***
- Lestophonus icerya**
 Isaac, Bug vs. Bug, 24, 1906.
- Leto staceyi**
 Ehrhorn, Pac. Rur. Press, LXXVI, 404, 1908.
- Leucania albilinea, see *Meliana***
- Leucania nigricornis**
 Patch, Me. B. 121, 171, 1905.
- Leucania pseudargyria**
 Forbes, Ill. Ent. R. 23, 171, 1905.
- Leucania sp.**
 Fernald, Mass. R. 18, 151, 1906.
- Leucania unipuncta, see *Heliophila***
- Leucobrephos brephoides**
 Felt, N. Y. R. 23, 47, 1908.
- Leucopis bella**
 Essig, Cal. Hort. B. III, 3, 127, 1914.
- Leucopis griseola**
 Cooley, Mont. B. 98, 127, 1914.
- Leucopis nigricornis**
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 35, '06.
 Sanders, U. S. C. 64, 4, 1905.
 Smith, Nebr. Hort. Soc. B. 20, 16, 1908.
- Leucopis sp. on aphids**
 Davidson, U. S. D. A. B. 100, 36, 1914.
- Leucotermes, see *Termes***
- Levy maggot trap, see *Musca domestica*, trap for**
- Lewy's Oriental Brand Camphorized Moth Crystals**
 ——— U. S. D. A. Ins. & Fung, No. 94, 1913.

Liburnia ornata

Forbes, Ill. Ent. R. 23, 204, 1905.

Lice

Stiles, Osler's Mod. Med., 1, 634, 1907.

Lice, dips for

Lewis, Okla. B. 72, 1906.

Lice on cattle

Cottell, Prog. Farm., July 4, 1905, 3.

Kaupp, Anim. Parasites, 33, 1908.

Rushing, Ind. Farm., Jan. 4, 1908, 5.

Lice on poultry

Halpin, Mich. B. 245, 239, 1907.

Pearl & Surface, Me. B. 179, 78, 1911.

See also Menopon

Lice on sheep

Horne, Ind. Farm., Mar. 9, 1907, 7.

Lichen-like beetle, see Leptostylus aculiferus

Light-loving anomala, see Anomala lucicola

Ligyrocoris sylvestris

Forbes, Ill. Ent. R. 23, 198, 1905.

Ligyus gibbosus

Chittenden, Ins. Inj. Veg. 185, 1907.

Forbes, Ill. Ent. R. 23, 98, 1905.

Gillette, Colo. R. 24, 30, 1911.

Miller, Farm & Ranch, June 7, '13, 13.

O'Kane, Inj. Ins. 124, 1914.

Sanderson, Ins. Pests, 414, 1912.

Titus, U. S. B. 54, 7, 1905.

Ligyus rugiceps

Forbes, Ill. Ent. R. 23, 99, 1905.

Garman, Ky. B. 145, 296, 1909.

Garrett, La. R. 21, 23, 1909.

Holloway, U. S. C. 171, 5, 1913.

O'Kane, Inj. Ins. 123, 1914.

Newell & Smith, U. S. B. 52, 72, 1905.

Pharr, La. Plant., Apr. 23, 1910, 367.

Rosenfeld, J. Ec. Ent. III, 213, 1910.

Sherman, N. C. Dept. Agr. B. 26, 5, 22, 1905.

Sherman, N. C. Dept. Agr. B. 35, 5, 41, 1914.

Titus, U. S. B. 54, 7, 1905.

Tucker, Can. Ent., 1911, 27.

Van Dine, La. Plant., May 14, '10, 421.

——— La. Plant., June 10, 1911, 367.

Lima bean pod-borer, see Etiella zinckenella

Lima bean stem-borer, see Monoptilota nubilella

Lime

Smith, N. J. B. 213, 30, 1908.

Lime and carbolic acid

Smith, N. J. R., 1908, 371.

Lime and potassium sulphide

Britton, Conn. R. 4, 245, 1905.

Smith, Ga. Bd. Ent. B. 21, 209, 1906.

Lime sulphur

Aldrich, Or. Judd Farm., Jan. 28, 1911, 148.

Bentley, Tenn. B. v. XIX, 2, 23, 1906.

Bentley, Tenn. Bd. Ent. R. f. '09, 24.

Bentley, Tenn. R. f. 1910, 180.

Bentley, Tenn. Bd. Ent. B. 8, 12, 1913.

Bethune, Ont. Agr. Coll. R. 33, 56, '08.

Blake, N. J. B. 231, 15, 1910.

Blake, N. J. B. 236, 6, 1911.

Britton, Conn. R. 4, 224, 1905.

Britton, U. S. B. 60, 136, 1906.

Britton, Conn. B. 165, 19, 1909.

Britton & Walden, Conn. R. 5, 196, '06.

Britton & Walden, Conn. R. 8, 840, '09.

Burgess, Rur. N. Y., 1907, 104.

Caesar, Ent. Soc. Ont. R. 38, 72, 1908.

Caesar, Ont. Agr. Coll. B. 177, 34, 1909.

Caesar, Ont. Agr. Coll. B. 198, 1, 1912.

Chandler, Mo. B. 102, 274, 1912.

Clark, Va. Agr. R. f. 1910, 185, 1910.

Clark, Wis. Hort. Soc. R. f. 1911, 235.

Clinton & Britton, Conn. R. f. 1911, 351, 1912.

Cole, Wash. Hort. Assoc. 8th R. 37, '12.

Conradi & Thomas. S. C. B. 143, 16, '09.

Cox, Ohio Bd. Agr. R. 61, 917, 1906.

Douglas, Farm. Guide, Apr. 23, '10, 8.

Farley, N. J. C. 24, 3.

Farrand, Mich. Farm., Mar. 28, 1908, v. 53, 340.

Felt, N. Y. R. 20, 387, 1905.

Felt, U. S. B. 52, 25, 1905.

Felt, N. Y. R. 21, 80, 1906.

Felt, N. Y. Fr. Grow. Assoc., 1910, 37.

Felt, Or. Judd Farm., Mar. 18, '11, 508.

Felt, Am. Agric., Apr. 15, 1911, 605.

Fernald, Mass. B. 125, 64, 1908.

Forbes, Ill. B. 107, 247, 1906.

Forbes, Ill. Hort. Soc. f. 1909, 29.

Forbes, Ill. Hort. Soc. f. 1910, 26, 1911.

Fox, Am. Agric., Dec. 24, 1910, 636.

Fulmer, Farm & Dairy, Can., Mar. 2, 1911, 7.

Garman, Ky. B. 147, 17, 1910.

Gillette, Colo. Fr. Grow., Mar. 1910, 38.

Lime sulphur (*Cont'd*)

- Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 14, 1907.
- Harris, Mich. Tech. B. 6, 374, 1911.
- Hatch, Wis. Hort. Soc. R., 1910, 149.
- Hayward, Or. Judd Farm., Apr. 13, 1907, 516.
- Henderson, Idaho B. 56, 3, 1907.
- Henderson, Northw. Hort., '08, 78, 105.
- Hey, Ill. Hort. Soc. f. 1911, 248, 1912.
- Hodgkiss & Sirrine, N. Y. St. B. 283, 475, 1905.
- Houser, Ohio C. 143, 59, 1914.
- Houser, Ohio Farm., Mar. 7, 1914, 334.
- Jarvis, Conn. Storrs B. 56, 230, 1909.
- Jarvis, Conn. Storrs B. 66, 258, 1911.
- Keitt, Wis. Hort. Soc. R. f. 1911, 127.
- Lanham, Mont. Hort. Soc., 1913, 58.
- Lewis, Ga. Bd. Ent. B. 27, 81, 1908.
- Lochhead, Can. Hort. XXVIII, 12, 64, 1905.
- Loop, Rur. N. Y., 1907, 507.
- Marlatt, U. S. B. 62, 72, 1906.
- McClew, Rur. N. Y., 1911, 1211.
- Melander, Wash. Pop. B. 2, 1908.
- Melander, Better Fr., Feb. 1909, 22.
- Melander, Wash. Pop. B. 64, 1914.
- Melander & Beattie, Wash. Pop. B. 16, 1909.
- Melander & Beattie, Wash. Pop. B. 28, 1910.
- Merry, Mich. Hort. Soc., 1905-1906, 69, 1907.
- Moore, Wis. Hort. Soc. R. f., 1913, 90.
- Morris & Parker, Mont. C. 36, 236, '14.
- Newell, La. Crop Pest Comm. C. 4, 24, 1905.
- Norton & Symons, Md. B. 164, 263, '12.
- Parrott, N. Y. Fr. Grow. Assoc., '06, 132.
- Parrott, N. Y. St. C. 9, 1908.
- Parrott, Am. Agric., Apr. 24, 1909, 528.
- Parrott, N. Y. Fr. Grow. Assoc., 1909, 24, 90.
- Parrott, N. Y. Fr. Grow. Assoc. f. '10, 27.
- Parrott, N. Y. Dept. Agr. B. 28, 91, '11.
- Parrott, N. Y. Fr. Grow. Assoc., '13, 46.
- Parrott, Beach & Sirrine, N. Y. St. B. 262, 41, 1905.
- Parrott, Hodgkiss & Schoene, N. Y. St. B. 302, 1908.
- Parrott & Schoene, N. Y. St. B. 330, 451, 1910.
- Patten, Rur. N. Y., 1911, 400.
- Phillips, Rur. N. Y., 1906, 325.
- Phillips, Va. Crop Pest Comm. C. 1, n. s., 1906.
- Phillips, Va. Hort. Soc. 11th R., 106, '07.
- Phillips, Va. Crop Pest Comm., C. 5, n. s., 1908.
- Phillips, South. Plant., Dec. '09, 1135.
- Pickett, Ill. Hort. Soc. f. 1907, 384.
- Plank, Rur. N. Y., 1912, 1265.
- Quaintance, U. S. C. 124, 12, 1910.
- Rauth, Farm. Guide, Jan. 24, 1914, 14.
- Rees, Mass. Hort. Soc. f. 1914, I, 86.
- Safro, J. Ec. Ent. V. 385, 1912.
- Scott, Mich. Hort. Soc., 1909, 112, 1910.
- Scott, Va. B. 188, 1910.
- Scott, Ill. Hort. Soc. f. 1910, 139, 1911.
- Scott, Va. Hort. Soc. 15th R., 179, 1911.
- Scott, W. Va. Hort. Soc. 18th R., 33, '11.
- Scott & Roberts, Pa. Dept. Agr. R. 16, 638, 1910.
- Shaw, Ohio Bd. Agr. R. 63, 1908, 697.
- Sheridan, Colo. Bd. Hort. R. f. 1911, 32, 1912.
- Sherman, N. C. Dept. Agr. B. 28, 5, 19, 1907.
- Sherman, N. C. Dept. Agr. B. June, 1909, 11.
- Sherman, N. C. Dept. Agr. B. 33, 6, 16, 1912.
- Sherman, N. C. Dept. Agr. B. June, 1912, 22.
- Skillman, Rur. N. Y., 1905, 911.
- Slingerland & Crosby, N. Y. C. B. 252, 348, 1908.
- Slingerland, Herrick & Crosby, N. Y. C. B. 283, 477, 1910.
- Smith, N. J. R. f. 1904, 629, 1905.
- Smith, N. J. R., 1905, 611.
- Smith, N. J. R., 1906, 585.
- Smith, Ga. Bd. Ent. B. 21, 205, 1906.
- Smith, N. J. R., 1907, 447.
- Smith, Nebr. Hort. Soc., 1908, 160.
- Smith, N. J. B. 213, 14, 1908.
- Smith, N. J. R., 1908, 373.
- Smith, N. J. R., 1909, 363.
- Soberg, Ala. Hort. Soc. R. 3, 17, 1906.
- Stahl, The Ranch, Dec. 1, 1913, 11.
- Stewart, Ill. Hort. Soc. f. '09, 199, 212.
- Stewart, Can. Hort. XXXIII, 53, 1910.
- Stewart, N. Y. Fr. Grow. Assoc., '10, 46.
- Stewart, Pa. R. 16, 654, 1910.

Lime sulphur (*Cont'd*)

- Stewart, Pa. Dept. Agr. R. 17, 392, '11.
 Stewart, Pa. Hort. Assoc., Pr. 52nd Meet., 176, 1911.
 Stewart, Better Fr., Feb. 1911, 30.
 Stewart, C. Gentl., May 25, 1912, 7.
 Stewart, Pa. B. 115, 3, 1912.
 Stewart, Vt. Hort. Soc. R. 10, 67, 1913.
 Stone, Mass. C. 31, 1911.
 Stone & Fernald, Mass. B. 123, 10, 1908.
 Surface, Can. Hort. XXXII, 27, 1909.
 Surface, Pa. D. A. Zoöl. VII, 6, 164, '09.
 Surface, Pa. Dept. Agr. R. 15, 661, '09.
 Surface, C. Gentl., May 25, 1911, 505.
 Surface, Pa. D. A. Zoöl. I, 2, 76, 1911.
 Surface, Pa. Dept. Agr. R. 17, 149, 1911.
 Symons & Weldon, Md. B. 123, 146, '07.
 Taft, Nat'l Fr. Grow., Mar. 1905, 8.
 Taft, Nat'l Fr. Grow., Aug. 1909, 9.
 Taft, Mich. Hort. Soc., 1908, 145, 1909.
 Taft, C. Gentl., 1909, 596.
 Taft, Mich. Farm., June 5, 1909, 601.
 Taft, Mich. Hort. Soc., 1910, 117, 1911.
 Taft, Prai. Farm., Mar. 1, 1911, 13.
 Tartar, J. Ec. Ent., VII, 463, 1914.
 Thatcher, Wash. B. 76, 3, 1906.
 Thatcher, Wash. Pop. B. 51, 1913.
 Thompson, Conn. Farm., May 20, '11, 7.
 Vail, Rur. N. Y., 1907, 174.
 Van Alstyne, Rur. N. Y., 1908, 891.
 Van Alstyne, Va. Agr. R. f. 1908, 103, 1908.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 485, 1911.
 Van Deman, Rur. N. Y., 1912, 278.
 Van Slyke, Bosworth & Hedges, N. Y. St. B. 329, 405, 1910.
 Wallace, N. Y. Fr. Grow. Assoc., '10, 58.
 Wallace, Wis. Hort. Soc. R. f. 1910, 140.
 Wallace, N. Y. C. 289, 1911.
 Warren, N. J. R. 194, 47, 1906.
 Watherell, Colo. Fr. Grow., Apr. '07, 12.
 Watkins, Prai. Farm., June 15, 1911, 6.
 Watkins, Mo. Hort. Soc., 1911, 110.
 Watkins, Col. Rur. World, Mar. 20, 1912, 90.
 Weldon, Colo. Fr. Grow., Mar. 1910, 35.
 Weldon, Green's Fr. Grow., Mar. '10, 7.
 Whetzel, Pr. N. Y. Fr. Grow. Assoc., 9, Meet., 7, 1910.
 Whetzel, Mass. Hort. Soc. f. 1911, I, 34.
 Williams & Price, Ala. Poly. B. 152, '11.
 Winslow, Can. Hort. XXXI, 76, 1908.
 Woodward, Rur. N. Y., 1909, 270, 926.
 Woodward, Rur. N. Y., 1909, 1025.
 Worsham, Pr. Ga. Hort. Soc., 1908, 76.
 Yost, Field & Farm., Apr. 10, 1909, 5.
 ——— Am. Agric., Jan. 18, 1913, 74.
 ——— Better Fr., Dec. 1908, 31.
 ——— C. Gentl., 1906, 256.
 ——— C. Gentl., 1907, 1216.
 ——— Mich. Sp. B. 51, 436, 1910.
 ——— Ohio, Bd. Agr. R. 61, 854, 1906.
 ——— Rur. N. Y., 1906, 39.
 ——— Rur. N. Y., 1906, 387.
 ——— Rur. N. Y., 1907, 126.
 ——— Rur. N. Y., 1910, 609.
 ——— Rur. N. Y., 1913, 600.
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 3, 37, 1914.
 ——— W. Va. Hort. Soc. 17th R., 56, 1910.

Lime sulphur, action

- Pough, Rur. N. Y., 1905, 353.
 Pough, Rur. N. Y., 1907, 493.
 Schleussner, Mich. Hort. Soc., 1911, 83, 1912.
 Shafer, J. Ec. Ent. IV, 50, 1911.

Lime sulphur, arsenate of lead

- Cordley, Rur. N. Y., 1908, 338.
 Cordley, Better Fr., May 1910, 37.
 Cordley, Northw. Hort., May 1910, 119.
 Gossard, J. Ec. Ent. IV, 204, 1911.

Lime sulphur, chemistry

- Fulmer, Ont. Agr. Coll. B. 177, 1909.
 Jordan, N. Y. St. B. 321, 452, 1909.
 Surface, Pa. Hort. Assoc., 51st Meet., 1910, 69.
 Tartar, Oreg. Res. B. 3, 4, 1914.
 Van Slyke, N. Y. Fr. Grow. Assoc., 1910, 66.
 Van Slyke, Hodges & Bosworth, N. Y. St. B. 319, 383, 1909.
 ——— U. S. D. A. Ins. & Fung. Bd. Ins. 1, 1914.

Lime sulphur. Concentrated

- Morris & Parker, Mont. C. 36, 240, '14.
 Parrott, N. Y. St. B. 320, 419, 1909.
 Patten, Mich. Hort. Soc., 1910, 63, 1911.
 Starcher, Va. B. 201, 3, 1913.
 Stewart, Pa. B. 92, 3, 1909.
 Stewart, Pa. Dept. Agr. R. 15, 645, 1909.
 Stewart, Pa. R. St. Coll. 271, 1910.

- Stewart, Pa. Hort. Assoc., 51st Meet., 1910, 44.
 ——— Mich. Sp. B. 51, 436, 1910.
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 2, 26, 1914.
- Lime sulphur injury**
 Hartzell, N. Y. St. B. 331, 579, 1910.
 Hewitt, Ark. B. 114, 516, 1913.
 Safo, Oreg. Research B. 2, 4, 1913.
 Safo, Can. Hort. XXXVII, 78, 1914.
 Wallace, N. Y. C. B. 288, 1910.
 Wallace, N. Y. Fr. Grow. Assoc., f. 1910, 52, 1911.
 Whetzel, C. Gentl., Feb. 9, 1911, 133.
- Lime sulphur.** *Manufacture and storage*
 Patten, Mich. C. 10, 306, 1911.
- Lime sulphur, poison**
 Scott & Siegler, U. S. B. 116, 81, 1913.
 Taft, Mich. Hort. Soc., 1910, 138, 1911.
- Lime-sulphur-salt**
 Derby, Rur. N. Y., 1905, 35.
 Fernald, Mass. B. 116, 15, 1907.
 Haywood, U. S. Bu. Chem. B. 101, '07.
 Johnson, Rur. N. Y., 1905, 910.
 Quayle, Cal. B. 166, 5, 1905.
 Parrott, Beach & Woodworth, N. Y. St. B. 247, 79, 1904.
 Parrott & Sirrine, N. Y. St. B. 254, 321, 1904.
 Sherman, N. C. Ent. C. 13, 6, 1905.
 Smith, N. J. R., 1905, 613.
 Smith, Ga. Bd. Ent. B. 21, 204, 1906.
 ——— Oreg. Bd. Hort. 8th Bien. R., 282, 1905.
 ——— U. S. D. A. Ins. & Fung. No. 23, 1914.
- Lime sulphur, self-boiled**
 Britton, Rur. N. Y., 1905, 162.
 Howard, Mo. P. B. 37, 1914.
 Selby, Rur. N. Y., 1908, 600.
 Smith, N. J. R., 1905, 612.
 Smith, N. J. B., 213, 16, 1908.
 Williams, Ala. Hort. Soc. R. 8, 104, '11.
- Lime sulphur-soda**
 Britton, Conn. R. 4, 225, 246, 1905.
 Jordan, N. Y. St. B. 260, 504, 1905.
 Newell, La. Crop Pest Comm. C. 4, 30, 1905.
 Parrott, N. Y. St. C. 9, 7, 1908.
 Smith, N. J. R., 1905, 543.
 Smith, N. J. R., 1906, 587.
- Smith, Ga. Bd. Ent. B. 21, 208, 1906.
 Smith, N. J. B. 213, 15, 1908.
- Lime sulphur-tar**
 Smith, Ga. Bd. Ent. B. 17, 85, 1905.
- Lime and sulphur vs. oils**
 Britton, Conn. Farm., Dec. 18, '09, 5.
 Fletcher, Rur. N. Y. 1910, 425.
- Lime-tree winter-moth,** *see* **Erannis tiliaria**
- Limenitis,** *see* **Basilarchia**
- Limneria guignardi**
 Johannsen & Patch, Me. B. 195, 242, '11.
 Patch, Me. B. 134, 224, 1906.
- Limnerium clisiocampae**
 Howard & Fiske, U. S. B. 91, 143, 192, 1911.
- Limnerium disparidis**
 Howard & Fiske, U. S. B. 91, 191, 1911.
 Howard, Mass. For. R. 10, 84, 1913.
 Howard, Ann. Ent. Soc. Am. VII, 87, 1914.
 Howard, U. S. R. Ent., 1914, 3.
- Limnerium fugitivum**
 Howard & Chittenden, U. S. C. 110, 5, 1909.
- Limnerium polymesiale**
 Morgan & Crumb, U. S. D. A. B. 59, 7, 1914.
- Limnerium sp.**
 Howard & Fiske, U. S. B. 91, 138, 1911.
- Limnerium sp. on Eurymus**
 Wildemuth, U. S. C. 133, 7, 1911.
 Wildemuth, U. S. D. A. B. 124, 21, 1914.
- Limnerium sp. on Diaphania**
 Smith, N. C. B. 214, 141, 1911.
- Limnerium tibiator**
 Chittenden & Marsh, U. S. B. 109, 31, 1912.
- Limnerium tricoloripes**
 Howard & Fiske, U. S. B. 91, 192, 1911.
- Limnerium validum**
 Timberlake, Tech. B. 19, pt. 5, U. S. Bur. Ent., 1912.
- Limnobia deplanata**
 Forbes, Ill. Ent. R. 23, 193, 1905.
- Limoid**
 ——— Rur. N. Y., 1907, 634.
- Limoid and kerosene**
 ——— Rur. N. Y., 1905, 179.
- Limonium californicus**
 Graf, U. S. B. 123, 11, 1914.

- Limoniuss confusus**
 Davis, J. Ec. Ent., III, 182, 1910.
 Davis, Ill. Ent. R. 26, 143, 1911.
- Limoniuss discoideus**
 Wilson, Oreg. Bien. Crop. Pest. R. f., 1913-1914, 198.
- Limothrips avenae**
 ——— U. S. Y. B., 1908, 570.
- Lina**, *see* **Melasoma**
- Linden borer**, *see* **Saperda vestita**
- Linden insects**
 Gibson, Ont. Ent. Soc. R. 35, 78, 1905.
 Gibson, Ont. Ent. Soc. R. 37, 78, 1907.
 Gibson, Ont. Ent. Soc. R. 41, 99, 1911.
- Lindorus lopanthae**, *see* **Rhizobius**
- Linnaemya picta**
 Chittenden, U. S. B. 109, 51, 1912.
- Linseed oil emulsion**
 Morris & Parker, Mont. C. 36, 247, '14.
 Webster, J. Ec. Ent. IV, 202, 1911.
- Lintner's scale**, *see* **Chionaspis lintneri**
- Lioderma uhleri**, *see* **Pentatoma**
- Lion Brand California Wash**
 Britton & Walden, Conn. R. 8, 841, '09.
- Lion Brand Strictly Pure Paris Green**
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 6, 91, 1914.
- Liopus alpha**
 Felt, N. Y. St. Mus. Mem. 8, 481, 1906.
- Liopus punctatus**
 Felt, N. Y. St. Mus. Mem. 8, 432, '06.
- Liotropis contaminatus**
 Hunter, Pratt & Mitchell, U. S. B. 113, 36, 1912.
- Liparis monacha**
 Hopkins, U. S. Y. B., 1907, 149.
- Lipeurus baculus**
 Kaupp, Colo. B. 185, 6, 1912.
- Lipeurus heterographus**
 Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 126, 1911.
- Lipeurus infuscatus**
 Kaupp, Colo. B. 185, 6, 1912.
- Lipeurus squalidus**
 Ewing, Oreg. Coll. B. 92, 11, 1913.
- Lipeurus variabilis**
 Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 126, 1911.
 Washburn, Minn. P. B. 22, 26, 1905.
- Lipolexis piceus**
 Webster & Phillips, U. S. B. 110, 136, '12.
- Lissorhopterus simplex**
 Garrett, La. R. 21, 23, 1909.
 Newell, J. Ec. Ent. VI, 55, 1913.
 Rosenfeld, J. Ec. Ent. III, 213, 1910.
 Tucker, U. S. C. 152, 1, 1912.
 Webb, J. Ec. Ent. VII, 432, 1914.
 ——— U. S. F. B., 1905, 631.
- Listronotus latiusculus**
 Britton, Conn. R. 13, 252, 1914.
 Chittenden, U. S. B. 82, 14, 1909.
- Lithocolletis blancardella**
 Felt, N. Y. R. 20, 404, 1905.
 Slingerland & Crosby, Man. Fr. Ins., 72, 1914.
- Lithocolletis caryaefoliella**
 ——— U. S. Y. B., 1908, 579.
- Lithocolletis crataegella**
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 119.
- Lithocolletis fitchella**
 Felt, N. Y. St. Mus. Mem. 8, 533, 1906.
- Lithocolletis hamadryella**
 Cory, Md. Hort. Soc., 1912, 193, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 532, 1906.
 Garman, Ky. B. 120, 51, 1905.
 ——— C. Gentl., 1909, 734.
- Lithocolletis sp. in live oak**
 Doane, J. Ec. Ent. V, 346, 1912.
- Little house fly**, *see* **Homalomyia brevis**
- Little red ant**, *see* **Monomorium pharaonis**
- Live stock insects**
 Surface, Pa. D. A. Zoöl. I, 1, 40, 1911.
- Lixus concavus**
 Baldwin, Ind. Ent. R. 6, 38, 1914.
 Chittenden, Ins. Inj. Veg., 247, 1907.
 Forbes, Ill. Ent. R. 23, 114, 1905.
 O'Kane, Inj. Ins. 138, 1914.
 Pettit, Mich. B. 233, 198, 1906.
 Sanborn, Okla. B. 100, 48, 1912.
 Sanderson, Ins. Pests, 408, 1912.
 Weiss, J. Ec. Ent. V, 434, 1912.
- Lixus mucidus**
 Forbes, Ill. Ent. R. 23, 114, 1905.
 ——— U. S. Y. B., 1908, 570.
- Lixus musculus**
 Pierce, U. S. B. 63, 43, 1907.
 Pierce, U. S. B. 73, 45, 1908.
 Pierce, U. S. B. 100, 75, 1912.
- Lixus scrobicollis**
 Pierce, U. S. B. 73, 45, 1908.
 Pierce, U. S. B. 100, 75, 1912.

- Loco weed insects**
Chittenden, U. S. B. 64, 29, 1908.
- Locust borer**, *see* *Cyllene robiniae*
- Locust insects**
Cotton, Ohio Nurs. Orch. Insp. B. 7, '06.
Surface, Pa. D. A. Zoöl. I, 1, 42, 1911.
Surface, Pa. D. A. Zoöl. II, 6, 242, 1912.
- Locust leaf folder**, *see* *Epargyreus tityrus*
- Lodgepole pine beetle**, *see* *Dendroctonus murrayanae*
- Loemopsylla**, *see* *Xenopsylla*
- Lonchaea longicornis**
Chittenden, U. S. B. 82, 90, 1911.
- Lonchaea polita**
——— U. S. Y. B., 1906, 511.
- Lonchaea splendida**
Quayle, U. S. D. A. B. 134, 11, 1914.
- London purple**
Garman, Ky. B. 147, 12, 1910.
Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 7, 1907.
——— U. S. D. A. Ins. & Fung. Bd., Ins. 1, 14, 1914.
- Longitarsus melanurus**
Pettit, Mich. B. 233, 180, 1906.
- Long-legged grasshopper**, *see* *Clinoppleura melanoppleura*
- Long-nosed ox-louse**, *see* *Haematopinus vituli*
- Long scale**, *see* *Lepidosaphes gloveri*
- Lophocateres pusillus**
Chittenden, U. S. B. 96, 14, 1911.
- Lophyrus abbotii**
Felt, N. Y. St. Mus. Mem. 8, 414, 1906.
Felt, N. Y. R. 26, 58, 1911.
Girault, Ent. News, 1912, 403.
Weiss, N. J. R., 1912, 431.
- Lophyrus abietis**
Cridde, Ont. Ent. Soc. R. 43, 100, 1913.
Felt, N. Y. St. Mus. Mem. 8, 415, 1906.
Johannsen, Me. B. 177, 42, 1910.
Johannsen, Me. B. 187, 8, 1911.
Patch, Me. B. 148, 272, 1907.
Patch, Me. B. 162, 365, 1908.
Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
——— U. S. Y. B., 1908, 575.
- Lophyrus lecontei**
Felt, N. Y. St. Mus. Mem. 8, 413, 1906.
Pettit, Mich. Farm., Sept. 30, 1911, v. 136, 272.
Walker, Ent. Soc. Ont. R. 42, 58, 1912.
- Lophyrus pini**
Hopkins, U. S. Y. B., 1907, 153.
- Lophyrus townsendi**
Bruner, Forestry, Dec. 1910, 411.
- Losses from insects**
Slingerland, N. Y. Fr. Grow. Assoc., 1907, 99.
Titus, Deseret Farm., Nov. 14, '08, 13.
- Loxa flavicollis**
——— U. S. Y. B., 1908, 577.
- Loxostege commixtalis**
Popenoe, Kans. Farm., May 31, '06, 581.
Sanborn, Okla. R. 21, 27, 1912.
- Loxostege similalis**
Barre & Conradi, S. C. B. 141, 32, 1909.
Chittenden, Ins. Inj. Veg. 61, 1907.
Conradi, Tex. Stockm. Farm., June 28, 1905, 6.
Conradi, U. S. B. 60, 68, 1906.
Cooley, Mont. R. 12, 264, 1906.
Dean, Kans. Agr. Educ. I, 4, 29, 1909.
Forbes, Ill. Ent. R. 23, 89, 1905.
Glenn, Prai. Farm., Sept. 15, 1913, 25.
Haseman, Mo. P. B. 54, 1914.
Headlee, Kans. B. 155, 334, 1908.
Hunter, U. S. F. B. 512, 40, 1912.
Newell, Tex. Stockm. Farm., Aug. 15, 1914, 7.
O'Kane, Inj. Ins. 183, 1914.
Popenoe, Farm. Guide, July 29, 1905, 4.
Popenoe, Ind. Farm., Aug. 12, 1905, 2.
Popenoe, Prai. Farm., July 27, 1905, 4.
Popenoe, Kans. B. 136, 182-185, 1906.
Popenoe, Kans. Farm., June 13, '07, 707.
Popenoe, Kans. Farm., June 20, '07, 731.
Sanborn, Okla. B. 100, 66, 1912.
Sanderson, U. S. F. B. 223, 7, 1905.
Sanderson, U. S. B. 57, 11, 1906.
Sanderson, Ins. Pests, 247, 406, 1912.
Swenk, Nebr. Farm., Aug. 26, '14, 813.
Trucker, Rur. N. Y., 1912, 927.
——— U. S. Y. B., 1906, 509, 510.
——— U. S. Y. B., 1907, 542.
——— U. S. Y. B., 1908, 567, 569, 572.
- Loxostege sp.**
Dean, Kans. Agr. Educ. I, 4, 74, 1909.
- Loxostege sticticalis**
Chittenden, Ins. Inj. Veg., 125, 1907.
Cooley, Mont. B. 64, 40, 1906.
Cooley, Mont. R. 12, 264, 1906.
Cooley, Mont. B. 88, 85, 1912.
Cooley, Mont. B. 92, 58, 1912.

- Cooley, Mont. B. 98, 125, 1914.
 Gillette, Colo. B. 98, 3, 1905.
 Gillette, U. S. B. 52, 60, 1905.
 Marsh, U. S. B. 109, 57, 1912.
 O'Kane, Inj. Ins. 184, 1914.
 Paddock, J. Ec. Ent. V, 436, 1912.
 Pettit, Mich. B. 233, 159, 1905.
 Sanderson, Ins. Pests, 332, 1912.
 Swenk, Nebr. Farm., Oct. 4, 1911, 927.
 Swenk, Nebr. Ent. B. 1, 58, 1913.
 Titus, Deseret Farm., Mar. 28, 1908, 7.
 Willing, Ont. Ent. Soc. R. 35, 26, 1905.
 Willing, Agr. Gaz. Can., Oct. 1914, 813.
 ——— U. S. Y. B., 1905, 630.
 ——— U. S. Y. B., 1907, 543.
 ——— U. S. Y. B., 1908, 571.
- Loxotropa pegomyiae**
 Washburn, Minn. R. 12, 132, 1908.
- Lubber grasshopper, see Brachystola magna**
- Lucilia caesar**
 Herrick, Household Ins. 49, 1914.
 Howard, U. S. C. 71, 2, 1906.
 Howard, U. S. F. B. 459, 6, 1911.
 Smith, N. J. B. 203, 28, 1907.
 Washburn, Minn. P. B. 22, 21, 1905.
 Whitmarsh, Ohio B. 253, 111, 1912.
- Lucilia cornicina, see Pseudopyrellia**
- Lucilia sericata**
 Hudson, Can. Ent., 1914, 416.
 Morse, Psyche, 1911, 89.
- Lucius suckleyi**
 Treherne, Ont. Ent. Soc. R. 43, 107, '13.
- Lunated long-sting, see Thalesa lunator**
- Luperodes brunneus**
 Sherman, N. C. Dept. Agr. B. 29, 6, 24, 1908.
 Sherman, J. Ec. Ent. II, 204, 1909.
 Smith, Ga. Bd. Ent. B. 20, 169, 1906.
 Smith, U. S. B. 67, 101, 1907.
 Smith & Lewis, U. S. B. 60, 80, 1906.
 Worsham, J. Ec. Ent. II, 209, 1909.
- Luperodes varicornis**
 Forbes, Ill. Ent. R. 23, 187, 1905.
 ——— U. S. Y. B., 1905, 631.
 ——— U. S. Y. B., 1906, 509.
- Lycia cognataria**
 Slingerland & Crosby, Man. Fr. Ins. 346, 1914.
- Lycosa riparia**
 Quaintance & Brues, U. S. B. 50, 111, '05.
- Lyctus parallelopipedus**
 Felt, N. Y. St. Mus. Mem. 8, 483, 1906.
- U. S. Y. B., 1906, 515.
- Lyctus planicollis**
 Smith, N. J. B. 203, 40, 1907.
 ——— U. S. Y. B., 1906, 515.
- Lyctus sp.**
 Herrick, Rur. N. Y., 1909, 997.
 Hopkins, U. S. B. 58, 66, 1909.
 Slingerland, Rur. N. Y., 1907, 4.
 Whitmarsh, Ohio B. 253, 138, 1912.
 ——— U. S. Y. B., 1907, 549.
- Lyctus spp.**
 Douglass, Ind. Ent. R. 1, 157, 1908.
 Herrick, Rur. N. Y., 1913, 1152.
 Hopkins, U. S. C. 128, 3, 1910.
 Kraus, Tech. B. 20, pt. 3, U. S. Bur. Ent., 1911.
 Lochhead, Ont. Ent. Soc. R. 35, 32, '05.
 Pettit, Mich. B. 244, 216, 1907.
 ——— U. S. Y. B., 1906, 515.
 ——— U. S. Y. B., 1908, 574.
- Lyctus striatus**
 Burgess, U. S. B. 52, 54, 1905.
 Herrick, Household Ins., 387, 1914.
- Lyctus unipunctatus**
 Felt, N. Y. St. Mus. Mem. 8, 296, 1905.
 ——— U. S. Y. B., 1906, 515.
- Lyda fasciata**
 Cory, Md. Hort. Soc., 1912, 192, 1913.
- Lyda hypotrophica**
 Hopkins, U. S. Y. B., 1907, 153.
- Lyda sp.**
 ——— U. S. Y. B., 1906, 512.
- Lyda sp. on spruce**
 Jarvis, Ont. Ent. Soc. R. 36, 127, 1906.
- Lydella doryphorae**
 Conradi, Tex. B. 89, 35, 1907.
 Sanderson, Ins. Pests, 294, 1912.
- Lye as an Insecticide**
 Britton, Rur. N. Y., 1912, 949.
- Lygaeonematus erichsonii, see Nematus**
- Lygaeus lateralis**
 Cooley, Mont. B. 98, 124, 1914.
- Lygaeus turcicus**
 Morrill, U. S. B. 86, 93, 1910.
- Lygidea mendax**
 Bethune, Ont. Agr. Coll. R. 38, 27, 1913.
 Caesar, Ont. Ent. Soc. R. 43, 103, 1913.
 Crosby, Can. Ent., 1911, 17.
 Crosby, N. Y. C. B. 291, 213, 1911.
 Felt, N. Y. Fr. Grow. Assoc., 1910, 35.
 Felt, N. Y. R. 26, 43, 1911.
 Parrott, J. Ec. Ent. VI, 64, 1913.

***Lygidea mendax* (Cont'd)**

- Parrott, N. Y. St. Fr. Grow. Assoc., 1913, 253.
 Parrott, N. Y. Dept. Agr. B. 30, 1741.
 Parrott & Hodgkiss, N. Y. St. B. 368, 382, 1913.
 Schoene, N. Y. St. C. 25, 3, 1913.
 Slingerland & Crosby, Man. Fr. Ins. 28, 1914.
 Smith, N. J. R., 1911, 421.
 Stewart, Pa. B. 128, 126, 1914.

Lygus invitus

- Caesar, Ont. Ent. Soc. R. 43, 105, 1913.
 Parrott, J. Ec. Ent. VI, 64, 1913.
 Parrott, N. Y. Fr. Grow. Assoc., '10, 33.
 Parrott & Hodgkiss, N. Y. St. B. 368, 364, 1913.
 Parrott & Hodgkiss, N. Y. St. C. 21, '13.
 Slingerland & Crosby, Man. Fr. Ins. 221, 1914.

Lygus pratensis

- Back & Price, J. Ec. Ent. V, 329, 1912.
 Baldwin, Ind. Ent. R. 5, 129, 1912.
 Bethune, Ont. Agr. Coll. B. 171, 7, 1909.
 Brittain, Pr. Ent. Soc. B. C., 4, 16, 1914.
 Britton, Conn. R. 4, 218, 1905.
 Britton, Conn. R. 6, 276, 1907.
 Britton, Conn. R. 13, 256, 1914.
 Caesar, Ont. Ent. Soc. R. 42, 30, 1912.
 Caesar, Ont. Ent. Soc. R. 43, 104, 1913.
 Chittenden, Ins. Inj. Veg. 87, 1907.
 Chittenden & Marsh, J. Ec. Ent. III, 477, 1910.
 Cooley, Mont. R. 12, 270, 1906.
 Crosby & Leonard, N. Y. C. B. 346, '14.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 66, 1913.
 Essig, Cal. Hort. B. II, 1-2, 148, 1913.
 Felt, N. Y. R. 25, 90, 1910.
 Forbes, Ill. Ent. R. 23, 118, 1905.
 Gibson, Ont. Ent. Soc. R. 36, 108, 1906.
 Gibson, Ont. Ent. Soc. R. 40, 14, 1910.
 Gibson, Ont. Ent. Soc. R., 43, 17, 1913.
 Gossard, Ohio B. 198, 76, 1908.
 Haseman, J. Ec. Ent. VI, 237, 1913.
 Herrick, Pr. N. Y. Fr. Grow. Assoc., 11, Meet., 42, 1912.
 Hitchings, Me. Comm. Agr. R., 1907, 208, 1908.
 Hitchings, Me. Ent. R. 3, 4, 1908.
 Hitchings, Me. Ent. R. 4, 5, 1909.
 Jarvis, Ont. Ent. Soc. R. 37, 46, 1907.

Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 374.

- Lochhead, Ont. Ent. Soc. R. 36, 131, '06.
 Lochhead, Syn. Ec. Ent. 40, 1914.
 Morris, Ont. Ent. Soc. R. 44, 24, 1914.
 O'Kane, Inj. Ins. 192, 347, 1914.
 Parrott, N. Y. Fr. Grow. Assoc., 1912, 50, 210.
 Parrott, Pr. West N. Y. Hort. Soc., 57 Meet., 120, 1912.
 Parrott, Jr. Ec. Ent. VI, 64, 1913.
 Parrott & Hodgkiss, N. Y. St. B. 368, 372, 1913.
 Patch, Me. B. 134, 214, 1906.
 Patch, Me. B. 148, 273, 1907.
 Patch, Me. B. 162, 364, 1908.
 Pettit, Mich. B. 233, 157, 1906.
 Quaintance, U. S. B. 97, 105, 1912.
 Sanborn, Okla. B. 100, 22, 1912.
 Sanderson, Ins. Pests, 339, 404, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 301, 375, 1914.
 Smith, Ga. Bd. Ent. B. 20, 166, 1906.
 Smith & Lewis, U. S. B. 60, 78, 1906.
 Swenk, Nebr. Ent. B. 1, 87, 1913.
 Taylor, J. Ec. Ent. I, 370, 1908.
 Treherne, Pr. Ent. Soc. B. C., 4, 30, '14.
 Whiteside, Mont. Bd. Hort. f. 1907-1908, 45, 1909.
 ——— C. Gentl., 1909, 859.
 ——— U. S. Y. B., 1906, 511.
 ——— U. S. Y. B., 1907, 544.
 ——— U. S. Y. B., 1908, 573.
- Lymexylon sericeum***
 Felt, N. Y. St. Mus. Mem. 8, 449, 1906.
 Hopkins, U. S. B. 58, 60, 1909.
 Hopkins, U. S. C. 126, 1, 1910.
 ——— U. S. Y. B., 1905, 632.
- Lyperosia irritans*, see *Haematobia serrata***
- Lysiphlebus rapae***
 Herrick & Hungate, N. Y. C. B. '300, 736, 1911.
- Lysiphlebus* sp.**
 Smith, Nebr. Bd. Agr. R. f. 1908, 312.
- Lysiphlebus* sp. on melon aphid**
 Swenk, Nebr. R. 24, 41, 1911.
- Lysiphlebus testaceipes*, see *Aphidius***
- Lysiphlebus tritici***
 English, Okla. C. Inform. 8, 1908.
 Howard & Fiske, U. S. B. 91, 22, 1911.
 Kelly, Pr. Ent. Soc. Wash. X, 163, 1908.
 Kelly, Pr. Ent. Soc. Wash. XI, 64, 1909.

- Sanborn, Okla. B. 100, 28, 1912.
 Swenk, Nebr. Bd. Agr. R. f. 1908, 313.
 Washburn, Minn. Ent. Sp. R. 16, 1908.
 Webster, U. S. Y. B., 1907, 239, 254.
 Webster, U. S. C. 85, 5, 1907.
 Webster, U. S. C. 93, 3, 1907.
 Webster, Ann. Ent. Soc. Am. II, 77, '09.
 Webster, U. S. C. 93 rev., 3, 1909.
- Macrobasis albida**
 Conradi, Tex. B. 89, 41, 1907.
- Macrobasis spp.**
 Swenk, Nebr. Bd. Agr. R. f. '08, 303.
- Macrobasis unicolor**
 Barre & Conradi, S. C. B. 141, 25, '09.
 Chittenden, Ins. Inj. Veg. 119, 1907.
 Gibson, Ent. Soc. Ont. R. 42, 84, 1912.
 Patch, Me. B. 148, 277, 1907.
 Patch, Me. B. 366, 1908.
 Popenoe, Kans. Farm., July 26, '06, 783.
 Sanderson, Ins. Pests, 316, 1912.
 Stuckey, South Cult., Mar. 15, '13, 38.
 Swenk, Nebr. Ent. B. 1, 21, 1913.
 Symons, Md. B. 101, 175, 1905.
 Washburn, Minn. R. 14, 38, 1912.
- Macrobasis unicolor var. murina**
 Criddle, Nor'-West Farm., Dec. 20, 1912, 1595.
- Macrocentrus cerasivoranae**
 Herrick, N. Y. C. B. 311, 291, 1912.
- Macrocentrus delicatus**
 Quaintance, U. S. Y. B., 1907, 443.
- Macrocentrus sp.**
 Patch, Me. B. 148, 265, 1907.
- Macrocheles sp. on boll weevil**
 Hunter and Pierce, U. S. B. 114, 137, '12.
- Macrodactylus subspinosus**
 Alderman, Giddings & Rumsey, W. Va. C. 7, 36, 1913.
 Baldwin, Ind. Ent. R. 5, 105, 1912.
 Barre & Conradi, S. C. B. 141, 48, 1909.
 Bethune, Ont. Agr. Coll. B. 158, 27, '07.
 Bethune, Ont. Agr. Coll. R. 32, 45, 1907.
 Britton, Conn. R. 5, 259, 1906.
 Butz, Col. Rur. World, July 18, '06, 227.
 Butz, Conn. Farm., July 21, 1906, 12.
 Caesar, Ont. Ent. R. 43, 80, 1913.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 45, 1906.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 99, 1913.
 Douglass, Ind. Ent. R. 1, 150, 1908.
- Douglass, Ind. Ent. R. 3, 199, 1910.
 Felt, Gard. Mag., June 1905, 234.
 Felt, N. Y. R., 21, 92, 1906.
 Felt, N. Y. St. Mus. Mem. 8, 575, 1906.
 Felt, U. S. B. 60, 89, 1906.
 Fletcher, Ont. Ent. Soc. R. 36, 82, 1906.
 Forbes, Ill. Ent. R. 23, 184, 1905.
 Fulton, Wright & Gregg, Pa. B. 110, 26, 1911.
 Funk, Pa. Dept. Agr. B. 152, 305, '07.
 Gibson, Ont. Ent. Soc. R. 36, 110, '06.
 Gossard, C. Gentl., 1908, 490.
 Gossard, Green's Fr. Grow., June 1908, 23.
 Gossard, J. Ec. Ent. I, 190, 1908.
 Gossard, O. Farm., July 4, 1908, 3.
 Gossard, Ohio P. B. 291, 1908.
 Hartzell, N. Y. St. B. 331, 530, 1910.
 Hartzell, J. Ec. Ent. IV, 419, 1911.
 Herrick, Rur. N. Y., 1911, 358.
 Herrick, Rur. N. Y., 1912, 720.
 Jarvis, Ont. Ent. Soc. R. 37, 51, 1907.
 Jarvis, Conn. Storrs B. 56, 254, 1909.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 358.
 Johnson, Pa. Dept. Agr. R. 17, 589, '11.
 Johnson, U. S. B. 97, 53, 1911.
 Johnson & Hammar, U. S. B. 89, 17, '10.
 Lamson, Conn. Storrs B. 71, 74, 1912.
 Lochhead, Ont. Ent. Soc. R. 36, 135, '06.
 Lochhead, Syn. Ec. Ent. 73, 1914.
 O'Kane, Inj. Ins. 322, 1914.
 Paddock, O. Farm., July 1, 1911, p. 3.
 Parrott, N. Y. Fr. Grow. Assoc., 1906, 24.
 Patch, Me. B. 123, 216, 1905.
 Patch, Me. B. 148, 271, 1907.
 Pettit, Mich. B. 251, 289, 1908.
 Price, Va. C. 7, 44, 1909.
 Quaintance & Shear, U. S. F. B. 284, 24, 1907.
 Rumsey, W. Va. Hort. Soc. 14th R., 30, 1907.
 Rumsey & Brooks, W. Va. R. f. 1905-1906, 22.
 Sanborn, Okla. B. 100, 48, 1912.
 Sanderson, Ins. Pests, 518, 1912.
 Shaw, Ohio Bd. Agr. R. 63, '08, 697.
 Shaw, Ohio Nurs. Orch. Insp. R. 7, 19, 1909.
 Sill, Pa. Dept. Agr. B. 217, 53, 1912.
 Slingerland, Rur. N. Y., '08, 566, 633.

Macroductylus subspinosus (Cont'd)

- Slingerland & Crosby, Man. Fr. Ins.
397, 1914.
- Slingerland, Herrick & Crosby, N. Y. C.
B. 283, 472, 1910.
- Smith, N. J. R., 1905, 540.
- Smith, N. J. R., 1906, 528.
- Smith, U. S. B. 67, 35, 1907.
- Smith, N. J. R., 1908, 321.
- Smith, N. J. R., 1909, 403.
- Smith, N. J. B. 235, 42, 1911.
- Smith, N. J. R., 1911, 442.
- Surface, Pa. Dept. Agr. R. 13, 500, 1907.
- Surface, Pa. D. A. Zool. VII, 2, 57, 1909.
- Swenk, Nebr. Bd. Agr. R. f. 1908, 297.
- Swenk, Nebr. Ins. Pest Bur. C. 3, 1, '08.
- Swenk, Nebr. Hort. Soc., 1909, 91.
- Symons & Gahan, Md. Hort. Soc., 1904,
37, 1905.
- Symons, Md. B. 101, 154, 1905.
- Taft, Mich. Farm., May 18, 1907, v. 51,
p. 536.
- Taft, Nat'l Fr. Grow., June 1908, 13.
- Troop, Ind. Hort. Soc. f. 1906, 122, '07.
- Troop, Or. Judd Farm., July 20, '07, 46.
- Wells, Or. Judd Farm., May 26, '06, 729.
- Zavitz, Ont. Ent. Soc. R. 36, 124, 1906.
- C. Gentl., 614, 635, 1906.
- C. Gentl., June 8, 1911, 548.
- Farm. World, Can., 1907, 706.
- U. S. Y. B., 1905, 633, 635.
- U. S. Y. B., 1906, 513.
- U. S. Y. B., 1907, 543, 551.
- U. S. Y. B., 1908, 576, 578.
- Macroductylus subspinosus, poisonous**
- Lamson, Conn. Farm., July 12, 1913, 7.
- Conn. Farm., July 1, 1911, 10.
- Macroductylus uniformis**
- Cook, Cal. Hort. B. III, 9, 372, 1914.
- Morrill, Ariz. Comm. Agr. & Hort. R. 6,
28, 1914.
- Morrill, S. W. Stockm., Aug. 21, '14, 10.
- Macrodyctium sp.**
- Brooks, W. Va. B. 119, 339, 1909.
- Rumsey, W. Va. R. f. 1909-1910, 79.
- Macroglenes sp. on Agromyza**
- Phillips, J. Agr. Res. II, 29, 1914.
- Macronoctua onusta**
- Britton, Conn., R. 6, 306, 1907.
- Felt, N. Y. R. 27, 52, 1912.
- Gibson, Ont. Ent. Soc. R. 36, 118, 1906.
- Smith, Rur. N. Y., 1910, 821.

Macrophthalma disjuncta

- Forbes, Ill. B. 116, 472, 1907.
- Forbes, Ill. Ent. R. 24, 160, 1908.
- Macrops vitticollis**
- Patch, Me. B. 148, 272, 1907.
- Macrorhoptus sphaeralaciae**
- Pierce, U. S. B. 100, 76, 1912.
- Macrosiphum albifrons**
- Essig, Cal. Hort. B. II, 1-2, 72, 1913.
- Macrosiphum cerealis**
- Dean, Kans. Agr. Educ. I, 4, 45, 1909.
- Bruner & Swenk, Nebr. B. 96, 35, 1907.
- U. S. Y. B., 1905, 510.
- Macrosiphum citrifolii**
- Essig, Pom. Jr. Ent. III, 592, 1911.
- Essig, Cal. Hort. B. I, 4, 122, 1912.
- Essig, Cal. Hort. B. II, 1-2, 72, 1913.
- Macrosiphum crataegi**
- Johannsen & Patch, Me. B. 195, 236, '11.
- Macrosiphum cucurbitae**
- Britton, Conn. R. 8, 814, 1909.
- Swenk, Nebr. Bd. Agr. R. f. 1910, 369.
- Macrosiphum cynosbati**
- Davis, Ann. Ent. Soc. Am. II, 38, 1909.
- Macrosiphum destructor, see M. pisi**
- Macrosiphum fragariae var. immaculata**
- Davis, J. Ec. Ent. IV, 327, 1911.
- Macrosiphum granaria**
- Bethune, Farm. World, Can., 1907, 699.
- Bishopp, U. S. Y. B., 1912, 398.
- Fletcher, Can. Exp. Farms B. 52, 17, '05.
- Gibson, Ont. Ent. Soc. R. 40, 10, 1910.
- Gossard, J. Ec. Ent. I, 191, 1908.
- Haseman, Mo. P. B. 46, 1914.
- Headlee, Kans. Farm., Apr. 30, '08, 530.
- Riddle-Smyth, Kans. Farm., June 20,
1907, 725.
- Sanderson, Ent. News., 1906, 327.
- Sanderson, Ins. Pests, 147, 1912.
- Smith, Nebr. Bd. Agr. R. f. 1908, 314.
- Swenk, Nebr. Bd. Agr. R. f. 1910, 363.
- Washburn, Minn. P. B. 32, 17, 1908.
- Washburn, Minn. R. 12, 47, 1908.
- Washburn, Minn. Ent. Sp. R., 11, 1908.
- Washburn, Minn. Ent. R. 13, 95, 1910.
- Webster, U. S. B. 67, 99, 1907.
- Webster, J. Ec. Ent. II, 210, 1909.
- U. S. Y. B., 1906, 510.
- Macrosiphum lactucae**
- Davis, J. Ec. Ent. III, 181, 1910.
- Davis, Ill. Ent. R. 26, 132, 1911.
- Davis, J. Ec. Ent. IV, 329, 1911.

Macrosiphum laevigatae

Patch, Me. B. 213, 84, 1913.

Macrosiphum liriiodendri

Morrison, Ind. Ent. R. 5, 232, 1912.

——— U. S. Y. B., 1907, 550.

——— U. S. Y. B., 1908, 578.

Macrosiphum lycopersici

Lovett, Oreg. Coll. B. 91, 14, 1913.

Macrosiphum martini

Cooley, Mont. B. 92, 58, 1912.

Macrosiphum pisi

Barre & Conradi, S. C. B. 141, 41, 1909.

Bethune, Ont. Agr. Coll. B. 171, 31, '09.

Britton & Walden, Conn. R. 13, 235, '14.

Chittenden, Ind. Inj. Veg., 114, 1907.

Chittenden, U. S. C. 43, 2nd Ed., 1, '09.

Conradi, Tex. B. 89, 4, 1907.

Davis, Ill. Ent. R. 26, 138, 1911.

Essig, Pom. Jr. Ent. II, 336, 1910.

Essig, Cal. Hort. B. II, 1-2, 73, 1913.

Felt, N. Y. R. 20, 408, 1905.

Fletcher, Can. Exp. Farms. B. 52, 27, 1905.

Folsom, Ill. B. 134, 138, 1909.

Folsom, Ill. Ent. R. 25, 66, 1909.

Forbes, Ill. Ent. R. 23, 208, 1905.

Gibson, Ont. Ent. Soc. R. 39, 119, 1909.

Gibson, Ont. Ent. Soc. R. 40, 14, 1910.

Gibson, Ont. Ent. Soc. R. 41, 16, 1911.

Gillette, U. S. B. 52, 50, 1905.

Gossard, J. Ec. Ent. IV, 208, 1911.

Gossard, Ohio B. 233, 78, 1911.

Johnson, Or. Judd Farm., Apr. 18, '08, 508.

Lovett, Oreg. Coll. B. 91, 16, 1913.

Morrison, Ind. Ent. R. 5, 232, 1912.

Newell & Rosenfeld, J. Ec. Ent. I, 153, 1908.

Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 108, 1909.

O'Kane, Inj. Ins. 200, 1914.

Patch, Me. B. 190, 81, 1911.

Pettit, Mich. B. 233, 191, 1906.

Pettit, Mich. B. 258, 285, 1910.

Rosenfeld, J. Ec. Ent. III, 214, 1910.

Sanborn, Okla. B. 100, 43, 1912.

Sanderson, Ins. Pests, 211, 322, 1912.

Slingerland, Rur. N. Y., 1908, 168.

Smith, N. J. Ent. C. 34.

Smith, Va. Truck Exp. Sta. B. 13, 301, 1914.

Swenk, Nebr. Hort. Soc. 1909, 104.

——— U. S. Y. B., 1905, 629, 635.

——— U. S. Y. B., 1906, 510.

——— U. S. Y. B., 1907, 544.

——— U. S. Y. B., 1908, 571.

Macrosiphum rosae

Essig, Pom. Jr. Ent. III, 550, 1911.

Essig, Cal. Hort. B. II, 1-2, 76, 1913.

Essig, Cal. Hort. B. II, 11, 725, 1913.

Davis, Ill. Ent. R. 27, 117, 1912.

Gahan, Md. B. 119, 16, 1907.

Lewis, Ga. Bd. Ent. B. 33, 91, 1910.

Lewis, Ga. Hort. Soc., 1910, 91.

Morrill, Cal. Cult., XLII, 235, 1914.

Morrison, Ind. Ent. R. 5, 234, 1912.

Russell, U. S. D. A. B., 90, 1, 1914.

——— U. S. Y. B., 1908, 578.

Macrosiphum rudbeckiae

——— U. S. Y. B., 1907, 551.

——— U. S. Y. B., 1908, 578.

Macrosiphum sanborni

Davis, Ill. Ent. R. 27, 116, 1912.

Gahan, Md. B. 119, 14, 1907.

Lewis, Ga. Bd. Ent. B. 33, 91, 1910.

Lewis, Ga. Hort. Soc., 1910, 91.

——— U. S. Y. B., 1908, 578.

Macrosiphum solanifolii

Britton, Conn. R. 12, 294, 1913.

Davis, Ill. Ent. R. 26, 145, 1911.

O'Kane, Inj. Ins. 202, 1914.

Patch, Me. B. 134, 215, 1906.

Patch, Me. B. 147, 235, 1907.

Patch, Me. B. 148, 273, 1907.

Patch, Me. B. 190, 81, 1911.

Patch, Me. B. 202, 178, 1913.

Webster, J. Ec. Ent. V, 471, 1912.

Young, Ont. Ent. Soc. R. 37, 15, 1907.

Macrosiphum spp.

Gillette, J. Ec. Ent. IV, 382, 1911.

Macrosiphum trifolii, see M. pisi**Macrosiphum viticola**

Dean & Peairs, Kans. Agr. Educ. VI, 2, 100, 1913.

O'Kane, Inj. Ins. 219, 1914.

Madarellus undulatus

Felt, N. Y. St. Mus. Mem. 8, 479, 1906.

Magdalis aenescens

Brittain, Pr. Ent. Soc. B. C., 4, 17, 1914.

Cooley, Mont. B. 79, 53, 1910.

Slingerland & Crosby, Man. Fr. Ins. 199, 1914.

Treherne, Pr. Ent. Soc. B. C., 4, 26, '14.

Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 159.

- Magdalis alutacea**
Felt, N. Y. St. Mus. Mem. 8, 402, 1906.
- Magdalis armicollis**
Felt, N. Y. St. Mus. Mem. 8, 75, '05.
Forbes, Ill. B. 154, 15, 1912.
Forbes, Ill. Ent. R. 27, 13, 1912.
- Magdalis barbata**
Felt, N. Y. St. Mus. Mem. 8, 73, 1905.
- Magdalis olyra**
Felt, N. Y. St. Mus. Mem. 8, 274, 1905.
- Magdalis perforata**
Felt, N. Y. St. Mus. Mem. 8, 402, '06.
- Maggot trap**
Levy & Tuck, Amer. Jr. Pub. Health,
IX, 657, 1913.
- Maggots**
Gibbon, Amer. Med., May 1906, 74.
- Maggots in sheep**
Kleinheinz, Iowa Home., Sept. 14, 1911,
1643.
- Magic Fly Killer Plant**
—— U. S. D. A. Ins. & Fung. Bd., Ins.
3, p. 43, 1914.
- Magnet Brand Poison Fly Paper**
—— U. S. D. A. Ins. & Fung. Bd., Ins.
3, p. 45, 1914.
- Maize bill-bug, see *Sphenophorus maidis***
- Malachius auritus**
Jones & Davidson, U. S. B. 115, 161, '12.
- Malacosoma americana**
Bailey, Vt. Agr. R. 5, 30, 1913.
Bailey, Vt. Agr. R. 6, 38, 1914.
Baldwin, Ind. Ent. R. 5, 63, 1912.
Ball & Titus, Deseret Farm., May 6,
1911, 1.
Barre & Conradi, S. C. B. 141, 23, 1909.
Beach, Iowa B. 127, 60, 1912.
Bedell, Rur. N. Y., 1909, 160.
Bethune, Ont. Agr. Coll. B. 158, 5, '07.
Britton, Conn. R. 11, 342, 1912.
Britton, Conn. B. 177, 1913.
Britton, Conn. Farm., May 31, 1913, 6.
Britton, Conn. R. 13, 226, 1914.
Brown, Nat'l Fr. Grow., Jan. 1908, 5.
Brown, Mich. Farm., July 18, 1914, v.
143, p. 43.
Burgess, U. S. B. 52, 53, 1905.
Caesar, Ont. Ent. Soc. R. 42, 30, 1912.
Caesar, Ont. Ent. Soc. R. 43, 76, 1913.
Caesar, Ont. Ent. Soc. R. 44, 50, 1914.
Clinton & Britton, Conn. R. f. 1909,
1910, 595, 1911.
- Conradi, S. C. B. 158, 3, 1911.
- Cunningham, Pr. Ent. Soc. B. C., 1, 18,
1911.
- Dean & Peairs, Kans. Agr. Educ. VI, 2,
41, 1913.
- Dillon, Am. Agric., Apr. 20, 1912, 571.
- Dillon, Or. Judd Farm., Apr. 20, '12,
617.
- Douglass, Ind. Ent. R. 2, 59, 1910.
- Douglass, Ind. Ent. R. 3, 117, 1910.
- Douglass, Ind. Ent. R. 4, 114, 1912.
- Essig, Cal. Hort. B. II, 1-2, 181, '13.
- Felt, N. Y. St. Mus. Mem. 8, 550, '06.
- Felt, N. Y. R. 28, 94, 1913.
- Felt, J. Ec. Ent. VII, 373, 1914.
- Fernald, Mass. R. 25, II, 85, 1913.
- Fulton, Wright & Gregg, Pa. B. 110, 17,
1911.
- Funk, Pa. Dept. Agr. B. 152, 217, '07.
- Garcia, N. Mex. B. 68, 46, 1908.
- Gardner, Me. Comm. Agr. R., 1913, 57,
1914.
- Garman, Ky. B. 133, 36, 1908.
- Gibson, Ont. Ent. Soc. R. 39, 116, '09.
- Gibson, Ont. Ent. Soc. R. 41, 13, '11.
- Gibson, Ont. Ent. Soc. R. 42, 11, 12, '12.
- Gibson, Ont. Ent. Soc. R. 43, 14, '13.
- Girault, Ent. News, 1912, 401.
- Girault, Ent. News, 1913, 54.
- Gossard, Ohio B. 164, 14, 1905.
- Gossard, Ohio B. 198, 46, 1908.
- Gossard, Ohio. B. 233, 109, 1911.
- Hall, Kans. Hort. Soc., 1905, 296.
- Haseman, Mo. Hort. Soc., 1911, 239.
- Herrick, Rur. N. Y., 1913, 813.
- Herrick, N. Y. Fr. Grow. Assoc., '13, 41.
- Hitchings, Comm. Agr. R., 1906, 196,
1907.
- Hitchings, Me. Ent. R. 2, 26, 1907.
- Hitchings, Me. Ent. R. 5, 10, 1910.
- Johannsen, Me. B. 207, 452, 1912.
- Johannsen & Patch, Me. Comm. Agr.
R. f. 1910, 361.
- Johannsen & Patch, Me. B. 195, 239, '11.
- Kirkland, Me. Dept. Agr. Quar. B., vol.
IV, 1, 8, 1905.
- Lamson, Conn. Storrs B. 71, 73, 1912.
- Latham, O. Farm. July 8, 1911, 23.
- Lochhead, Ont. Agr. Coll. B. 144, 30,
1905.
- Lochhead, Ont. Ent. Soc. R. 40, 68,
1910.

- Lochhead, Ont. Ent. Soc. R. 43, 85, 1913.
 Lochhead, Syn. Ec. Ent. 67, 1914.
 Loveland, R. I. R. 1911, Ent. Dept., 14, 1911.
 McFarland, Rur. N. Y., 1911, 897.
 Moore, Wis. B. 190, 13, 1910.
 Munson, Me. Dept. Agr. Quar. B., vol. iv, 1, 15, 1905.
 O'Kane, Inj. Ins. 266, 1914.
 Ormsbee, Amer. Cult., June 29, '12, 10.
 Patch, Me. B. 108, 162, 1905.
 Patch, Me. B. 123, 214, 1905.
 Patch, Me. B. 148, 264, 1907.
 Price, Va. C. 7, 25, 1909.
 Quaintance, U. S. C. 98, 1, 1908.
 Quaintance & Scott, U. S. F. B. 492, 21, 1912.
 Rane, Mass. For. R. 10, 78, 1913.
 Rumsey & Brooks, W. Va. R. f. 1907-1908, 18.
 Rumsey & Brooks, W. Va. B. 116, 235, 1908.
 Sanderson, U. S. B. 60, 75, 1906.
 Sanderson, Ins. Pests, 608, 1912.
 Saunders, Amer. Cult., July 30, 1910, 11.
 Slingerland & Crosby, N. Y. C. B. 252, 340, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 112, 1914.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 469, 1910.
 Smith, Ga. Bd. Ent. B. 17, 104, 1905.
 Smith, Ga. Bd. Ent. B. 20, 167, 1906.
 Smith, N. C. B. 206, 67, 1910.
 Smith & Lewis, U. S. B. 60, 79, 1906.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 9.
 Stahl, The Ranch, Mar. 15, 1914, 8.
 Stedman, Mo. Hort. Soc., 1905, 278.
 Stene, R. I. Bd. Agr. R. 21, 60, 1906.
 Stene, R. I. Nurs. Insp., 44, 1906.
 Stene, R. I. Bd. Agr. R. 25, 147, 1910.
 Strausson, The Ranch, June 15, '13, 8.
 Surface, Pa. D. A. Zool. V. 12, 370, 1908.
 Surface, Pa. Dept. Agr. R. 16, 123, 1910.
 Swaine, Ont. Ent. Soc. R. 41, 94, 1911.
 Swaine, Can. Exp. Farms Ent. C. 1, 6, 1913.
 Swenk, Nebr. Hort. Soc. B. 19, 15, 1908.
 Swenk, Nebr. Hort. Soc., 1909, 83.
 Symons, Md. B. 101, 136, 1905.
 Taft, Mich. R. 53, 154, 1914.
 Washburn, Farm. Guide, June 17, 1911, 5.
 Weed, Am. Agric., May 22, 1913, 397.
 Whiteside, Mont. Bd. Hort. f. 1905, 7, 41, 1907.
 Williams, Nebr. Farm., July 22, 1908, 638.
 Woods, Me. B. 137, 295, 1906.
 Pac. Rur. Press, LXXIII, 323, 1907.
 Rur. N. Y., 1913, 1030.
 ——— U. S. Y. B., 1905, 633.
 ——— U. S. Y. B., 1907, 547.
- Malacosoma californica**
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 118, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 226, 1907.
- Malacosoma constricta**
 Ehrhorn, Cal., Hort. Comm. Bien. R. 1, 118, 1905.
 Wilson, Oreg., Bien. Crop Pest R. f. 1911-1912, 116.
- Malacosoma disstria**
 Bailey, Vt. Agr. R. 5, 31, 1913.
 Bailey, Vt. Agr. R. 6, 40, 1914.
 Baldwin, Ind. Ent. R. 5, 65, 1912.
 Bethune, Ont. Agr. Coll. B. 158, 5, '07.
 Bremner, Cal. Hort. Comm. Destr. Ins. 9, 1910.
 Britton, J. Ec. Ent. IV, 544, 1911.
 Britton, Conn. R. 11, 343, 1912.
 Britton, Conn. B. 177, 13, 1913.
 Buckley, Me. Dept. Agr. B., vol. X, 3, 2, 1911.
 Caesar, Ont. Ent. Soc. R. 44, 50, 1914.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 41, 1906.
 Douglass, Ind. Ent. R. 3, 118, 1910.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 226, 1907.
 Essig, Cal. Hort. B. II, 1-2, 182, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 106, 1905.
 Felt, N. Y. R. 27, 101, 1912.
 Felt, N. Y. R. 28, 99, 1913.
 Felt, J. Ec. Ent. VII, 373, 1914.
 Forbes, Ill. B. 151, 483, 1911.
 Forbes, Ill. Ent. R. 26, 21, 1911.
 Gibson, Ont. Ent. Soc. R. 43, 15, 1913.
 Gibson, Ont. Ent. Soc. R. 44, 17, 1914.
 Gossard, Ohio B. 164, 14, 1905.
 Gossard, Ohio B. 198, 46, 1908.

Malacosoma disstria (*Cont'd*)

- Gossard, Ohio B. 233, 109, 1911.
 Hawes & Chandler, Vt. B. 176, 76, 1914.
 Hitchings, Amer. Cult., Sept. 25, '09, 2.
 Houser, Ohio B. 194, 185, 1908.
 Johannsen, Me. B. 207, 453, 1912.
 Johannsen & Patch, Me. Comm. Agr.
 R. f. 1910, 350.
 Lochhead, Ont. Ent. Soc. R. 43, 85, 1913.
 Lochhead, Syn. Ec. Ent. 67, 1914.
 Munson, Me. B. 128, 67, 1906.
 O'Kane, Inj. Ins. 269, 1914.
 Patch, Me. B. 108, 162, 1905.
 Patch, Me. B. 148, 263, 1907.
 Slingerland & Crosby, Man. Fr. Ins. 119,
 1914.
 Smith, Ga. Bd. Ent. B. 20, 168, 1906.
 Smith & Lewis, U. S. B. 60, 79, 1906.
 Somes, Mo. Fr. Exp. Sta. Bien. R.,
 1913-1914, 9.
 Swaine, Can. Exp. Farms Ent. C. 1, 8,
 1913.
 Washburn, Minn. R. 12, 115, 1908.
 Washburn, Farm. Guide, June 17, '11, 5.
 ——— U. S. Y. B., 1906, 512.

Malacosoma erosa

- Doane, J. Ec. Ent. V, 346, 1912.
 Treherne, Ont. Ent. Soc. R. 43, 106, '13.
 Treherne, Pr. Ent. Soc. B. C., 4, 21, '14.
 Wilson, Oreg. Bien. Crop Pest R. f.
 1911-1912, 116.
 Wilson, Pr. Ent. Soc. B. C., 2, 5, 1912.

Malacosoma fragilis

- Ball & Titus, Utah Hort. Comm. Bien.
 R. f. 1909-1910, 47, 1911.
 Gillette, Colo. B. 114, 8, 1906.
 Gillette, Better Fr., Feb. 1910, 16.
 Slingerland & Crosby, Man. Fr. Ins.
 118, 1914.
 Van Dyke, Cal. Hort. B. III, 9, 351, '14.

Malacosoma pluvialis

- Wilson, Oreg. Bien. Crop Pest R. f.
 1911-1912, 116,
 ——— U. S. Y. B., 1906, 512.

Malacosoma sp.

- Brittain, Pr. Ent. Soc. B. C., 4, 14, '14.
 Wilson, Pr. Ent. Soc. B. C., 4, 36, 1914.
 Woodworth, Cal. C. 18, 1906.
 Jarvis, Conn. Storrs B. 56, 241, 1909.

Malacosoma sylvatica

- Cooper, Cal. Hort. Comm. Ins. & In-
 sect., 13, 1905.

Malaria mosquito, see Anopheles maculipennis**Mallodon in pecan**

- Barre & Conradi, S. C. B. 141, 45, 1909.

Mallodon melanopus

- Gossard, Fla. B. 79, 308, 1905.

Mamara sp.

- Felt, N. Y. R. 27, 101, 1912.
 Quaintance, Pr. Ent. Soc. Wash. X, 2,
 1908.
 Cockle, Pr. Ent. Soc. B. C., 1, 13, 1911.

Mamestra legitima

- Chittenden, U. S. B. 66, 28, 1907.
 O'Kane, Inj. Ins. 171, 1914.
 Sanborn, Okla. B. 100, 11, 1912.

Mamestra picta

- Baldwin, Ind. Ent. R. 6, 39, 1914.
 Bethune, Ont. Agr. Coll. B. 171, 17, '09.
 Davis, Prai. Farm., Aug. 1, 1908, 6.
 Davis, J. Ec. Ent. III, 185, 1910.
 Fletcher, Can. Exp. Farms B. 52, 37, '05.
 Forbes, Ill. Ent. R. 23, 171, 1905.
 Garman, Ky. B. 133, 62, 1908.
 Gibson, Ont. Ent. Soc. R. 36, 112, '06.
 Gibson, Can. Hort. XXXIV, 153, 1909.
 Gibson, Ont. Ent. Soc. R. 43, 13, '13.
 Jarvis, Ont. Ent. Soc. R. 37, 48, 1907.
 Lochhead & Jarvis, Ont. Agr. Coll. B.
 150, 11, 1906.
 O'Kane, Inj. Ins. 171, 1914.
 Pettit, Mich. B. 233, 160, 179, 1906.
 Rogers, Cal. B. 208, 114, 1911.
 Symons, Md. B. 101, 185, 1905.
 Vosler, Cal. Hort. B. II, 11, 713, '13.
 ——— U. S. Y. B., 1908, 571.

Mamestra renigera

- Forbes, Ill. Ent. R. 23, 35, 1905.

Mamestra trifolii

- Close & White, Md. B. 133, 195, 1909.
 Gibson, Can. Exp. Farms Ent. B. 3, 24,
 1912.
 Marsh, U. S. B. 127, 13, 1913.
 Symons, Md. B. 101, 185, 1905.

Mantis religiosa

- Smith, U. S. B. 52, 78, 1905.

Manzanita serica, see Serica anthracina**Maple false scale, see Phenacoccus acericola****Maple insects**

- Surface, Pa. D. A. Zool. II, 6, 243, 1912.

Maple mites

- Hodgkiss, J. Ec. Ent. VI, 420, 1913.

Maple scale cottony, *see* *Pulvinaria vitis*

Margaronia, *see* *Diaphania*

Margaropus annulatus

Baker, South. Plant., Feb. 1907, 136.

Beaver, Tex. Stockm. Farm., Feb. 22, 1905, 10.

Belcher, Tex. Stockm. Farm., Mar. 24, 1909, 2.

Bishopp, Ent. News, 1913, 366.

Burson, South. Cult., Jan. 1, 1912, 37.

Bush, South. Plant., Apr. 1906, 312.

Butler, Prog. Farm., July 2, 1910, 562, 579, 594, 631.

Butler, N. C. R. 29, 21, 1906.

Butler, South. Cult., Apr. 1, 1910, 35.

Butler, Prog. Farm., Aug. 13, 1, 1910, 645, 662, 680, 698, 716, 734, 754.

Cary, Ala. Poly. B. 141, 110, 1907.

Cotton, Tenn. B. 81, 53, 1908.

Cotton, Tenn. R. f. 1910, 112, 182.

Cotton, Tenn. B. 94, 119, 1911.

Cotton, Tenn. R. f. 1912, 65.

Curtice, South. Plant., May, '05, 376.

Curtice, South. Plant., Apr. 1907, 351.

Curtice, S. W. Stockm., Dec. 13, 1907, 1.

Curtice, U. S. B. An. I. R., 1910, 255.

Curtice, U. S. B. An. I. C. 187, 1912.

Dalrymple, La. B. 84, 5, 1905.

Dalrymple, Farm & Ranch, Apr. 14, 1906, 1.

Dalrymple, La. Plant., June 24, '11, 404.

Dalrymple, Amer. Vet. Rev. XLII, 550, 1913.

Dinwiddie, Ark. B. 101, 185, 1908.

Doane, Ins. Disease, 28, 1910.

Ferneyhough, South. Plant., Feb. 1906, 112.

Ferneyhough, South. Plant., Mar. 1908, 220.

Ferneyhough, South. Plant., Mar. 1911, 290.

Fischer, Ohio Bd. Agr. R. 61, 717, 1906.

Garman, U. S. B. 60, 17, 1906.

Graybill, U. S. B. An. I. B. 130, 1911.

Graybill, U. S. F. B. 378, 5, 1909.

Graybill, U. S. F. B. 498, 5, 1912.

Graybill, U. S. B. An. I. B. 167, 1913.

Graybill & Ellenberger, U. S. B. An. I. C. 183, 1911.

Graybill & Ellenberger, U. S. B. An. I. C. 207.

Graybill & Lewallen, U. S. B. An. I. B. 152.

Graybill & Lewallen, Ala. Poly. B. 171, 90, 1913.

Hermes, Cal. Cult., XLI, 264, 1913.

Hering, South. Cult., Dec. 15, 1910, 34.

Hering, Amer. Vet. Rev. XXXVIII, 756, 1911.

Hibbard, Jr. Infect. Dis., IX, 324, 1911.

Hinds, Ala. Poly. C. 7, 635, 1912.

Hinds, Ala. Poly. R. 24, 867, 1912.

Hobson, South Plant., Oct. 1906, 793.

Holman, Farm & Ranch, July 3, 1909, 1.

Hooker, Bishopp & Wood, U. S. B. 106, 111, 1912.

Howard, U. S. R. Ent., 1906, 24.

Howard, U. S. R. Ent., 1907, 30.

Howard, U. S. R. Ent., 1908, 29.

Howard, U. S. R. Ent., 1909, 34.

Howard, U. S. R. Ent., 1910, 33.

Hudson, South. Plant., June 1907, 556.

Hunt, Prog. Farm., Apr. 11, 1914, 482.

Hunter, U. S. C. 91, 1, 1907.

Hunter, J. Ec. Ent. I, 51, 1908.

Hunter & Bishopp, U. S. Y. B., 1910, 229.

Hunter & Hooker, U. S. B. 72, 9, 1907.

Hunter & Mitchell, U. S. B. An. I. C. 148, 1909.

Jackson, Prog. Farm., Dec. 12, '14, 1255.

Kaupp, Anim. Par. 67, 1905.

Kersener, Kans. Farm., Aug. 27, 1908, 900.

Kiernan, Prog. Farm., May 27, '09, 11.

Klein, U. S. B. An. I. C. 110, 1907.

Klein, S. C. B. 130, 3, 1907.

Kolb, Ala. Dept. Agr. R. f. 1913, 137.

Lenton, Tex. Stockm. Farm., July 17, 1907, 4.

Lewis, Okla. B. 72, 6, 1906.

Lewis, Okla. B. 81, 6, 1908.

Lewis, Okla. C. Inform. 11, 1908.

Lewis, Prog. Farm., June 27, 1914, 733.

Logan, Tex. Stockm. Farm., July 26, 1905, 6.

Luckey, Mo. Bd. Agr. R. 40, 43, 1908.

Luckey, Mo. Bd. Agr. R. 41, 57, 1909.

Luckey, Mo. Bd. Agr. R. 42, 55, 1910.

Luckey, Mo. Bd. Agr. R. 43, 55, 1911.

Luckey, Mo. Bd. Agr. R. 46, 58, 1914.

McAtee, Auk, XXVIII, 136, 1911.

Mathews, C. Gentl., Apr. 4, 1914, 686.

Mayer, Pr. La. Agr. Soc. 18, 103, 1905.

Margaropus annulatus (*Cont'd*)

- Mayer, U. S. F. B. 261, 7, 1906.
 McKellar, U. S. Bur. An. I. R., '11, 283.
 McKellar & Hart, U. S. B. An. I. R., 1909, 283.
 McKellar & Hart, U. S. B. An. I. C. 174, 1911.
 McLain, U. S. F. B. 639, Dec. 19, 1914.
 Melvin, Tex. Stockm. Farm., May 8, 1912, 6.
 Melvin, U. S. B. An. I. C. 196, 1912.
 Melvin, U. S. B. An. I. R., 1914, 1.
 Miller, C. Gentl., July 13, 1911, 5.
 Mitchell, Tex. Stockm. Farm., Mar. 31, 1909, 1.
 Mohler, U. S. B. An. I. B. 78, 1905, 6.
 Mohler, U. S. F. B. 258, 6, 1906.
 Mohler, Or. Judd Farm., June 9, 1906, 779.
 Mohler, U. S. F. B. 569, 4, 1914.
 Morgan, La. B. 82 2d ser., 5, 1905.
 Morgan, Tenn. B. v. XVIII, 1, 3, 1905.
 Newell, La. Crop Pest Comm. C. 7, 15, 1906.
 Newell & Dougherty, La. Crop Pest Comm. C. 10, 5, 1906.
 Newell, La. Crop Pest Comm. C. 13, 10, 1907.
 Newell, La. Crop Pest Comm. C. 14, '07.
 Newell & Mauldin, La. Crop Pest Comm. C. 21, 1908.
 Nicholson, Okla. R. 17, 70, 1908.
 Nighbert, Rawl, Riggs, & Lever, S. C. C. 24, 3, 1914.
 O'Kane, Inj. Ins. 375, 1914.
 Parker, Veter. Record, XXX, 359, '06.
 Parker, Tex. Stockm. Farm., June 12, 1907, 2.
 Powers, S. C. C. 6, 5, 1912.
 Price, South. Plant., July 1906, 558.
 Quarles, Tex. Stockm. Farm., Mar. 22, 1911, 13.
 Ransom, U. S. Y. B., 1905, 145.
 Ransom, U. S. B. An. I. C. 98, 1, 1906.
 Ransom, U. S. B. An. I. R., 1908, 504.
 Ransom & Graybill, U. S. B. An. I. B. 144, 1912.
 Salmon, Amer. Vet. Rev. XXXVI, 679, 1910.
 Schroeder, U. S. B. An. I. R., 1905, 49.
 Schroeder, U. S. Bur. An. I. R. 22, 49, '07.
 Scott, Cal. Cult., XXVII, 104, 1911.
 Selleck, Pac. Rur. Press, LXXIV, 157, 1907.
 Selleck, S. W. Stockm., Aug. 28, '08, 9.
 Sheldon, Mo. Bd. Agr. R. 46, 51, 1914.
 Smith, Prog. Farm., Mar. 23, 1912, 399.
 Soule, South. Plant., Jan. 1906, 16.
 Stever, Amer. Vet. Rev. XLI, 23, 158, 1912.
 True, U. S. F. B. 244, 1906.
 Vincenheller, Ark. B. 90, 131, 1906.
 Waddell & Allen, Tex. Stockm. Farm., Apr. 17, 1912, 3.
 Webster, U. S. Y. B., 1907, 238.
 Weihe, South. Plant., Nov. 1905, 837.
 Williams, South. Plant., Oct. '05, 759.
 Williamson, South. Cult., Nov. 1, 1905, 29.
 Willoughby, South. Cult., Oct. 15, 1906, 26.
 Wilson, Pac. Rur. Press, LXXIII, 246, 1907.
 Wilson, Tex. Stockm. Farm., Apr. 8, 1908, 6.
 ——— C. Gentl., Nov. 9, 1912, 25.
 ——— Fla. Grow., Oct. 4, 1913, 12.
 ——— Fla. Grow., Jan. 3, 1914, 20.
 ——— Pac. Rur. Press, LXXII, 121, '06.
 ——— Prog. Farm., Dec. 22, 1909, 12.
 ——— Prog. Farm., Jan. 13, 1912, 50.
 ——— Prog. Farm., Oct. 5, 1912, 1028.
 ——— Prog. Farm., May 25, 1914, 634.
 ——— Rur. N. Y., 1905, 901.
 ——— South. Cult., Mar. 15, 1907, 41.
 ——— S. W. Stockm., Mar. 22, 1912, 5.
 ——— Tex. Stockm. Farm., July 10, 1907, 2.
 ——— U. S. B. An. I. C. 97, 1905, 1.
 ——— U. S. B. An. I. B. 97, 1907.
 ——— U. S. B. An. I. R., 1910, 267.
 ——— U. S. Y. B., 1906, 516.
 ——— U. S. Y. B., 1907, 552.
 ——— U. S. Y. B., 1908, 580.

Margaropus annulatus—Legislation

- Cary, Ala. Vet. A. R. 6, 361, 1912.
 ——— Pac. Rur. Press, LXXIII, 261, '07.

Margaropus annulatus on sheep

- Hunter, Tex. Stockm. Farm., July 24, 1907, 4.

Margaropus annulatus—Quarantine

- Bentley, Tenn. Bd. Ent. R. f. 1907, 41.
 Ferneyhough, South. Plant., Nov. 1909, 1041.

- Keane, Pac. Rur. Press, LXXXIII, 495, 1912.
- Lewis, Okla. B. 81, 27, 1908.
- Morgan, La. B. 82 2d ser., 6, 1905.
- Morgan, Tenn. B. v. XVIII, 1, 4, 1905.
- Vincenheller, Ark. B. 90, 131, 1906.
- Williamson, South. Cult., Sept. 15, 1910, 29.
- Pac. Rur. Press, LXXIV, 107, 1907.
- Pac. Rur. Press, LXXIX, 253, 1910.
- see* Tick eradication
- Margaropus annulatus australis**
Hooker, Bishopp & Wood, U. S. B. 106, 117, 1912.
- Marguerite fly**, *see* **Phytomyza chrysanthemi**
- Marlatt scale**, *see* **Phoenicococcus marlatti**
- Marmara opuntiella**
Hunter, Pratt & Mitchell, U. S. B. 113, 31, 1912.
- Masicera myoidoea**
Washburn, J. Ec. Ent. III, 168, 1910.
- Masicera pachytili**
Essig, Cal. Hort. B. II, 1-2, 260, '13.
Isaac, Bug *vs.* Bug, 25, 1906.
- Masicera sp.**
Wildermuth, U. S. D. A. B. 124, 24, '14.
- Masicera sp. on alfalfa caterpillar**
Wildermuth, U. S. C. 133, 7, 1911.
- Masicera sylvatica**
Howard & Fiske, U. S. B. 91, 303, 1911.
- Mastopoda pteridis**
Patch, Me. B. 182, 246, 1910.
Patch, Me. B. 202, 160, 1913.
- May beetle**, *see* **Lachnosterna fusca**
- Mayetiola destructor**
Baldwin, Ind. Ent. R. 5, 142, 1912.
Barre & Conradi, S. C. B. 141, 52, 1909.
Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 48.
Bruner, Nebr. Farm., Jan. 5, 1905, 3.
Bruner, Iowa Home, Apr. 27, '05, p. 731.
Bruner, Wis. Farm., May 4, 1905, 4.
Bruner, Nebr. Farm., Aug. 24, 1905, p. 796.
Bruner & Swenk, Nebr. B. 96, 3, 1907.
Burgess, U. S. B. 52, 55, 1905.
Burgess, U. S. B. 60, 71, 1906.
Caesar, Farm & Dairy, Can., Aug. 22, 1912, 2.
- Caesar, Ont. Ent. Soc. R. 42, 33, 1912.
- Caesar, Ont. Ent. Soc. R. 43, 83, 1913.
- Caesar, Ont. Ent. Soc. R. 44, 53, 1914.
- Cooper, Cal. Hort. Comm. Ins. & Insect., 20, 1905.
- Cory, Md. Hort. Soc., 1912, 189, 1913.
- Criddle, Nor'-West Farm., Dec. 20, 1907, 1157.
- Criddle, J. Ec. Ent. IV, 236, 1911.
- Criddle, J. Ec. Ent. V, 248, 1912.
- Criddle, Ont. Ent. Soc. R. 43, 97, 1913.
- Dean, Kans. Agr. Educ. I, 4, 30, 1909.
- Dean & McColloch, Kans. C. 37, 1914.
- Dean & McColloch, Kans. Farm., June 6, 1914, 5.
- Derr, U. S. F. B. 443, 44, 1911.
- Douglass, Ind. Ent. R. 1, 166, 1908.
- Douglass, Ind. Ent. R. 2, 93, 1910.
- Douglass, Ind. Ent. R. 4, 229, 1912.
- Dugger & Gauthen, Ala. Poly. B. 179, 124, 1914.
- Ehrhorn, Cal. Fr. Grow., Apr. 29, 1905, 15.
- English, Okla. C. Inform. 9, 1908.
- Essig, Cal. Hort. B. II, 1-2, 244, 1913.
- Felt, N. Y. R. 28, 31, 1913.
- Fletcher, Can. Exp. Farms B. 52, 13, '05.
- Forbes, Prai. Farm., Sept. 1, 1909, 4.
- Forbes, Prai. Farm., Sept. 15, 1910, 15.
- Forbes, Or. Judd. Farm., Sept. 24, 1910, 312.
- Gibson, Ont. Ent. Soc. R. 39, 117, 1909.
- Gibson, Ont. Ent. Soc. R. 41, 12, 1911.
- Gossard, Ohio P. B. 283, 1906.
- Gossard, O. Farm., Jan. 7, 1911, p. 3.
- Gossard, Farm. Guide, Sept. 9, '11, 9.
- Gossard, J. Ec. Ent. IV, 207, 1911.
- Gossard, Ohio B. 233, 62, 1911.
- Gossard, Ohio P. B. 325, 1911.
- Gossard & Houser, Ohio B. 177, 1, 1906.
- Haseman, Mo. Bd. Agr. R. 44, 283, '12.
- Haseman, Mo. P. B. 42, 1914.
- Haseman, Mo. P. B. 55, 1914.
- Haseman, Mo. C. 70, 21, 1914.
- Haseman, Mo. P. B. 51, 1914.
- Hayhurst, J. Ec. Ent. II, 231, 1909.
- Headlee, Kans. Farm., May 7, '08, 554.
- Headlee, Kans. Farm., July 16, '08, 775.
- Headlee, Kans. Farm. Oct. 29, '08, 1116.
- Headlee, Kans. P. B. 163, 1908.
- Headlee, Kans. R. 21, XLVII, 1908.
- Headlee, Kans. Agr. Educ. I, 3, 12, '09.

Mayetiola destructor (*Cont'd*)

- Headlee, Kans. Farm., Mar. 13, '09, 23.
 Headlee, Kans. Farm., July 17, 1909, 1.
 Headlee, Kans. Farm., Aug. 21, 1909, 3.
 Headlee, Kans. P. B. 179, 1909.
 Headlee, Kans. Farm., June 15, '12, 2.
 Headlee, J. Ec. Ent. V, 98, 1912.
 Headlee & Parker, Kans. Tech. B. 188, 87, 1913.
 Hewitt, Farm. Advocate, Can., '11, 1515.
 Howard, U. S. R. Ent., 1905, 291.
 Howard, U. S. R. Ent., 1906, 18.
 Howard, U. S. R. Ent., 1907, 24.
 Howard, U. S. R. Ent., 1908, 24.
 Howard, U. S. R. Ent., 1909, 28.
 Howard, U. S. R. Ent., 1910, 26.
 Jones, Prai. Farm., Sept. 15, 1914, 26.
 Lochhead, Syn. Ec. Ent. 86, 1914.
 Menges, Pa. Dept. Agr. R. 17, 473, '11.
 Menges, Pa. Dept. Agr. B. 222, 74, 1912.
 Morgan, Tenn. Bd. Ent. R. f. 1910, 39.
 Newell & Smith, U. S. B. 52, 71, 1905.
 Nicholson, Okla. R. 17, 60, 1908.
 O'Kane, Inj. Ins. 139, 1914.
 Osborn, U. S. B. 52, 50, 1905.
 Pettit, Mich. Farm., Mar. 16, 1907, v. 51, p. 283.
 Pettit, Mich. B. 258, 307, 1910.
 Pettit, Mich. Farm., Aug. 22, 1914, v. 143, p. 138.
 Popenoe, Kans. B. 136, 151, 1906.
 Price, Va. C. 7, 69, 1909.
 Ross, Kans. Farm., July 25, 1914, 4.
 Sanderson, Ins. Pests, 123, 1912.
 Sherman, Ont. Ent. Soc. R. 36, 24, 1906.
 Slingerland, Rur. N. Y., 1905, 727.
 Smith, Ga. Bd. Ent. B. 20, 170, 1906.
 Smith, U. S. B. 67, 102, 1907.
 Smith, N. C. R. 33, 33, 1910.
 Smith, N. J. Bd. Agr. R. 37, 186, 1910.
 Smith & Lewis, U. S. B. 60, 81, 1906.
 Summers, Iowa Home., June 4, '14, 1129.
 Surface, Pa. D. A. Zoöl. III, 5, 159, '05.
 Surface, Pa. D. A. Zoöl. V, 12, 401, '08.
 Surface, Pa. Dept. Agr. R. 17, 162, '11.
 Surface, Pa. D. A., Zoöl. I, 4, 187, 1911.
 Surface, Pa. D. A. Zoöl. II, 5, 212, 1912.
 Swenk, Nebr. Bd. Agr. R. f. 1910, 362.
 Swenk, Nebr. Ent. B. 1, 63, 1913.
 Swenk, Nebr. Farm., Jan. 14, '14, p. 44.
 Swenk, Nebr. Farm., Feb. 4, 1914, 125.
 Swenk, Nebr. Farm., Oct. 14, 1914, 978.
 Symons, Md. B. 101, 165, 1905.
 Symons & Cory, Md. B. 175, 175, 1913.
 Troop, Farm. Guide, July 15, 1911, 7.
 Troop, Farm. Guide, June 6, 1914, 15.
 Troop, Farm. Guide, Aug. 8, 1914, 7.
 Troop, Ind. Farm., Aug. 8, 1914, 11.
 Troop, Ind. R. 27, 48, 1914.
 Tucker, Kans. Farm., Feb. 9, 1905, 147.
 Waldron, Or. Judd Farm., July 21, 1906, 44.
 Waldron, N. Dak. R. 23, 32, 1913.
 Washburn, Minn. R. 10, 60, 1905.
 Washburn, U. S. B. 52, 55, 1905.
 Washburn, U. S. B. 60, 84, 1906.
 Webster, Nebr. Farm., Jan. 26, '05, p. 92.
 Webster, U. S. Y. B., 1905, 474.
 Webster, U. S. C. 70, 1, 1906.
 Webster, U. S. Y. B., 1907, 243.
 Webster, U. S. Y. B., 1908, 371.
 Webster, Iowa Agric., July 1914, 561.
 Wiancko & Fisher, Ind. B. 114, 308, '06.
 Wood, Nebr. Farm. Aug. 3, 1905, p. 736.
 Worsham, J. Ec. Ent. II, 208, 1909.
 ——— U. S. Y. B., 1905, 633.
 ——— U. S. Y. B., 1906, 509.
 ——— U. S. Y. B., 1907, 542.
 ——— U. S. Y. B., 1908, 568.
- Mayetiola destructor.** *Parasites of*
 Headlee & Parker, Kans. Tech. B. 188, 109, 1913.
- McGowen, injector**
 Smith, N. J. B. 200, 21, 1907.
- Meadow worm,** *see* *Tipula bicornis*
- Meal sap-beetle,** *see* *Carpophilus dimidiatus*
- Meal snout-moth,** *see* *Pyrallis farinalis*
- Meal worms,** *see* *Tenebrio*, *Tribolium*, *Silvanus*
- Mealy bugs**
 Essig, Cal. Hort. B. III, 3, 97, 1914.
 Fernald, Mass. Crop R. f. Oct. 1907, 32.
 Fernald, Mass. Bd. Agr. R. 55, 388, '08.
 Lochhead, Syn. Ec. Ent. 42, 1914.
 Slingerland, Rur. N. Y., 1907, 921.
 Surface, Pa. D. A. Zoöl. V, 12, 385, '08.
- Mealy plum aphid,** *see* *Hyalopterus arundinis*
- Mealy wing,** *see* *Aleyrodes citri*
- Mediterranean flour-moth,** *see* *Ephestia kuehniella*
- Megachile acuta**
 Cooley, Mont. B. 92, 82, 1912.

- Megachile lippae**
Cockerell, J. Ec. Ent. VI, 424, 1913.
- Megachile spp.**
Swenk, Nebr. Hort. Soc. R., 1908, 155.
Swenk, Nebr. Hort. Soc. B. 19, 20, 1908.
- Megalopyge opercularis**
Smith, U. S. B. 67, 106, 1907.
- Megaphasma denticrus**
Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 17.
- Megarhinus rutila**
Coffin, Md. B. 109, 104, 1906.
- Megarhinus septentrionalis**
Morgan & Cotton, Science, XXVII, 28, 1908.
- Megaspilus striatipes**
Washburn, Minn. R. 12, 131, 1908.
- Megastigmus laricis**
Mareovitch, Can. Ent., 1914, 435.
- Megastigmus spp.**
Rohwer, Tech. B. 20, pt. 6, U. S. Bur. Ent., 1912.
- Megilla fuscilabris**
Britton, Conn. B. 181, 21, 1914.
Weiss, J. Ec. Ent. VI, 408, 1913.
Chittenden, U. S. C. 43, 2nd Ed., 5, '09.
- Megilla maculata**
Chittenden, U. S. Y. B., 1912, 322.
Forbes, Ill. Ent. R. 23, 179, 1905.
Garman & Jewett, Ky. B. 187, 581, 1914.
Gates, J. Ec. Ent. VII, 348, 1914.
Girault, Jr. N. Y. Ent. Soc. XV, 193, '07.
Johnson, Ent. News, 1907, 173.
Quaintance, U. S. C. 102, 6, 1908.
Quaintance & Brues, U. S. B. 50, 107, 1905.
Sanborn, Tex. B. 89, 50, 1907.
Sanborn, Okla. B. 98, 11, 1912.
Smith, Nebr. Ins. Pest Bur. C. 4, 3, '08.
Symons, Md. B. 101, 196, 1905.
Tucker, Farm & Ranch, Apr. 16, '10, 11.
Tucker, La. B. 145, 7, 1914.
Webster, U. S. C. 85, 5, 1907.
Webster & Phillips, U. S. B. 110, 129, 1912.
- Megilla vittigera, see Paranaemia**
- Megorismus fletcheri**
Britton, J. Ec. Ent. III, 434, 1910.
- Megorismus sp. on green bug**
Webster & Phillips, U. S. B. 110, 125, 1912.
- Megoura solani**
Watson, Fla. B. 112, 33, 1912.
Watson, Fla. B. 125, 72, 1914.
- Melalopha inclusa**
Britton, Conn. R. 10, 710, 1911.
Britton, Conn. R. 11, 310, 1912.
Cory, Md. Hort. Soc., 1912, 192, 1913.
Felt, N. Y. St. Mus. Mem. 8, 560, 1906.
Garman, Ky. B. 120, 56, 1905.
- Melanauster chinensis**
Smith, N. J. R., 1907, 444.
- Melandrya striata**
Felt, N. Y. St. Mus. Mem. 8, 493, 1906.
- Melanolestes picipes**
Herrick, Household Ins. 419, 1914.
- Melanophila fulvoguttata**
Felt, N. Y. St. Mus. Mem. 8, 390, 1906.
- Melanoplus atlantis**
Bruner, U. S. B. 54, 61, 1905.
Fletcher, Farm. Advocate, Can., 1907, 1825.
Forbes, Ill. Ent. R. 23, 136, 1905.
Garman, Ky. B. 125, 44, 1906.
Gibson, Ont. Ent. Soc. R. 44, 16, 1914.
Kelly, J. Agr. Res. II, 436, 1914.
Morgan, U. S. Y. B., 1910, 293.
Pettit, Mich. B. 233, 206, 1906.
Pettit, Mich. B. 258, 302, 1910.
Sanderson, Ins. Pests, 98, 1912.
Wilson, Oreg. Bien. Crop Pest. R. f. 1913-1914, 134.
——— U. S. Y. B., 1907, 542.
——— U. S. Y. B., 1908, 568.
- Melanoplus biliturus**
Kelly, J. Agr. Res. II, 440, 1914.
- Melanoplus bivittatus**
Bruner, U. S. B. 54, 61, 1905.
Cooley, Mont. R. 12, 273, 1906.
Cooley, Mont. B. 88, 87, 1912.
Forbes, Ill. Ent. R. 23, 136, 1905.
Gillette, U. S. B. 52, 61, 1905.
Headlee, Kans. B. 155, 332, 1908.
Jardine & Call, Kans. B. 197, 609, 1914.
Kelly, J. Agr. Res. II, 435, 1914.
Patch, Me. B. 162, 365, 1908.
Quayle, J. Ec. Ent. IV, 526, 1911.
Sanderson, Ins. Pests, 99, 1912.
Swenk, J. Ec. Ent. IV, 286, 1911.
Webster, U. S. C. 84, 3, 1907.
- Melanoplus devastator**
Hunter, Cal. B. 170, 5, 1905.
Sanderson, Ins. Pests, 99, 1912.

Melanoplus devastator conspicuus

Essig, Cal. Hort. B. II, 1-2, 18, 1913.

Melanoplus differentialis

Bruner, U. S. B. 54, 61, 1905.

Chittenden, Ins. Inj. Veg., 71, 1907.

Essig, Cal. Hort. B. II, 1-2, 17, 1913.

Forbes, Ill. Ent. R. 23, 136, 1905.

Gillette, U. S. B. 52, 61, 1905.

Headlee, Kans. B. 155, 332, 1908.

Hunter, Cal. B. 170, 17, 1905.

Jardine & Call, Kans. B. 197, 609, 1914.

Kelly, J. Agr. Res. II, 435, 1914.

Morrill, Ariz. Comm. Agr. & Hort. R. 6, 40, 1914.

Quayle, J. Ec. Ent. IV, 526, 1911.

Saßborn, Okla. B. 100, 35, 1912.

Sanderson, U. S. F. B. 223, 10, 1905.

Sanderson, U. S. B. 57, 19, 1906.

Sanderson, Ins. Pests, 99, 1912.

Smith, N. J. R., 1908, 342.

Webster, U. S. B. 67, 98, 1907.

Webster, U. S. Y. B., 1907, 248.

Webster, U. S. C. 84, 2, 1907.

——— U. S. Y. B., 1906, 509.

——— U. S. Y. B., 1907, 542.

——— U. S. Y. B., 1908, 568.

Melanoplus femur-rubrum

Britton, Conn. R. 6, 274, 1907.

Bruner, U. S. B. 54, 61, 1905.

Chittenden, Ins. Inj. Veg. 70, 1907.

Douglass, Ind. Ent. R. 2, 116, 1910.

Forbes, Ill. Ent. R. 23, 136, 1905.

Garman, Ky. B. 125, 44, 1906.

Gillette, U. S. B. 52, 61, 1905.

Jarvis, Ont. Ent. Soc. R. 37, 50, 1907.

Kelly, J. Agr. Res. II, 436, 1914.

Metcalfe, N. C. Dept. Agr. Sp. B., 59, 1909.

Patch, Me. B. 148, 269, 1907.

Patch, Me. B. 162, 365, 1908.

Pettit, Mich. B. 233, 206, 1906.

Pettit, Mich. B. 258, 302, 1910.

Quayle, J. Ec. Ent. IV, 526, 1911.

Sanderson, Ins. Pests, 98, 1912.

Smith, N. J. R., 1908, 342.

Washburn, U. S. B. 60, 84, 1906.

Wilson, Oreg. Bien. Crop Pest. R. f. 1913-1914, 134.

Melanoplus infanticus

Bruner, U. S. B. 54, 64, 1905.

Melanoplus lakinus

Bruner, U. S. B. 54, 61, 1905.

Melanoplus occidentalis

Bruner, U. S. B. 54, 64, 1905.

Melanoplus packardii

Bruner, U. S. B. 54, 64, 1905.

Melanoplus scudderii

Forbes, Ill. Ent. R. 23, 142, 1905.

Melanoplus spretus

Chittenden, Ins. Inj. Veg. 70, 1907.

Forbes, Ill. Ent. R. 23, 136, 1905.

Headlee, Kans. B. 153, 332, 1908.

Matheson, S. D. Hort. Soc. 5th R. 215, 1908.

Sanderson, Ins. Pests, 93, 1912.

Webster, U. S. C. 84, 3, 1907.

Webster, U. S. Y. B., 1908, 377.

——— U. S. Y. B., 1906, 517.

Melanoplus spp.

Dean, J. Ec. Ent. VII, 67, 1914.

Garcia, N. Mex. B. 68, 33, 1908.

Hughes, Iowa B. 137, 70, 1913.

Melanoplus uniformis

Essig, Cal. Hort. B. II, 1-2, 19, 1913.

Hunter, Cal. B. 170, 5, 1905.

Melanophila drummondii

Burke, U. S. Y. B., 1909, 404.

Melanophila fulvoguttata

Burke, U. S. Y. B., 1909, 405.

Felt, J. Ec. Ent. VII, 373, 1914.

Melanophthalma distinguenda

Forbes, Ill. Ent. R. 23, 182, 1905.

Melanophthalma pumila

Forbes, Ill. Ent. R. 23, 182, 1905.

Melanostoma mellinum

Symons, Md. B. 101, 199, 1905.

Melanotus communis

Swenk, Nebr. Bd. Agr. R. f. 1910, 364.

Swenk, Nebr. Ent. B. 1, 79, 1913.

Symons, Md. B. 101, 161, 1905.

Webster, U. S. Y. B., 1908, 383.

Melanotus cribulosus

Britton, Conn. R. 6, 268, 1907.

Stedman, Mo. Bd. Agr. R. 38, 244, 1906.

Melanotus fissilis

Johannsen & Patch, Me. B. 195, 233, '11.

Melanoxantharium antennatum

Patch, Me. B. 213, 87, 1913.

Melanoxantharium bicolor

Patch, Me. B. 213, 85, 1913.

Melanoxantharium salicis

Patch, Me. B. 213, 88, 1913.

Melanoxantharium salicti

Patch, Me. B. 213, 86, 1913.

Melanoxantherium smithiae

Patch, Me. B. 213, 86, 1913.

Melasoma interrupta

Britton, Conn. R. 10, 707, 1911.

Melasoma lapponica

Felt, N. Y. St. Mus. Mem. 8, 564, 1906.

Forbes, Ill., Ent. R. 23, 186, 1905.

Garman, Ky. B. 120, 59, 1905.

Harned, Pr. Columbus Hort. Soc., 1906, 106.

Swenk, Nebr. Hort. Soc. 1909, 120.

Melasoma scripta

Britton, Conn. R. 10, 707, 1911.

Bruner, Nebr. Ent. R. f. 1907-1908, 9.

Burgess, U. S. B. 60, 74, 1906.

Felt, N. Y. St. Mus. Mem. 8, 317, 1905.

Fernald, Mass. R. 25, II, 87, 1913.

Garman, Ky. B. 120, 55, 1905.

Smith, N. J. R., 1910, 347.

Smith, N. J. B. 427, 1911.

Swenk, Nebr. Hort. Soc., 1909, 119.

Washburn, Minn. R. 12, 109, 1908.

Weiss, N. J. R., 1912, 436.

Weiss & Patterson, N. J. C. 15, 7, 1912.

——— U. S. Y. B., 1905, 635.

Melasoma spp.

Bruner, Nebr. Farm., Aug. 25, 1909, 755.

Swenk, Nebr. Hort. Soc. R., 1909, 103.

Melasoma tremulae

Criddle, J. Ec. Ent. IV, 240, 1911.

Criddle, Ont. Ent. Soc. R. 43, 100, 1913.

Felt, N. Y. St. Mus. Mem. 8, 565, 1906.

Meliana albilinea

Ainslie, U. S. B. 85, 60, 1910.

Forbes, Ill. Ent. R. 23, 83, 1905.

Gossard, Ohio B. 233, 67, 1911.

O'Kane, Inj. Ins. 214, 1914.

Quayle, J. Ec. Ent. IV, 525, 1911.

Swenk, Nebr. Bd. Agr. R. f. 1910, 363.

Webster, J. Ec. Ent. II, 210, 1909.

Webster, J. Ec. Ent. III, 503, 1910.

Webster, Iowa B. 122, 325, 1911.

Webster, J. Ec. Ent. IV, 179, 1911.

Webster, J. Ec. Ent. V, 335, 1912.

——— U. S. Y. B., 1906, 510.

Melitara dentata

Hunter, Pratt & Mitchell, U. S. B. 113, 28, 1912.

Melitara fernaldialis

Hunter, Pratt & Mitchell, U. S. B. 113, 29, 1912.

Melitara junctolineella

Hunter, Pratt & Mitchell, U. S. B. 113, 25, 1912.

Melitara prodenialis

Hunter, Pratt & Mitchell, U. S. B. 113, 28, 1912.

Melittia satyriniformis

Barre & Conradi, S. C. B. 141, 39, 1909.

Bentley, Tenn. Agr. v. 2, No. 5, 173, '13.

Bentley, Tenn. Bd. Ent. R. f. '13, 35.

Britton, Conn. R. 8, 806, 1909.

Chittenden, Ins. Inj. Yeg., 168, 1907.

Chittenden, U. S. C. 38, 2d. Ed., 1, '08.

Conradi, Tex. B. 89, 27, 1907.

Ehrhorn, Cal. Fr. Grow., Dec. 12, 1908, 13.

Ehrhorn, Pac. Rur. Press, LXXVI, 388, 1908.

Fulton, Wright & Gregg, Pa. B. 110, 37, 1911.

Jarvis, Conn. Storrs B. 56, 268, 1909.

Lewis, Pr. Ga. Hort. Soc. f. 1912, 12.

Morman, C. Gentl., June 14, 1913, 913.

Newell & Smith, U. S. B. 52, 72, 1905.

O'Kane, Inj. Ins. 134, 1914.

Pettit, Mich. B. 233, 198, 1908.

Postiff, Mich. Farm., July 13, 1912, v. 139, p. 32.

Reed, Ga. Hort. Soc. f. 1914, 61.

Sanborn, Okla. B. 100, 52, 1912.

Sanderson, Ins. Pests, 393, 1912.

Slingerland & Crosby, N. Y. C. B. 252, 344, 1908.

Slingerland, Herrick & Crosby, N. Y. C. B. 283, 471, 1910.

Smith, Ga. Bd. Ent. B. 16, 42, 1905.

Smith, N. C. B. 197, 55, 1908.

Smith, N. C. B. 205, 23, 1910.

Surface, Pa. D. A. Zoöl. I, 1, 29, 1911.

Swenk, Nebr. Bd. Agr. R. f. 1908, 304.

Swenk, Nebr. Bd. Agr. R. f. 1910, 369.

Weiss, N. J. R., 1912, 441.

——— Prai. Farm., May 25, 1905, 5.

——— Rur. N. Y., 1913, 832.

——— U. S. Y. B., 1907, 544.

——— U. S. Y. B., 1908, 572.

Melittobia acasta

Howard & Fiske, U. S. B. 91, 209, 1911.

Meloe angusticollis

Patch, Me. B. 148, 278, 1907.

Melon aphid, see Aphis gossypii**Melon caterpillar, see Diaphania hyalinata**

Melon insects

Bentley, Tenn. Agr., vol. 2, No. 5, 172, '13.

Melon worm, see *Diaphania hyalinata***Melophagus ovinus**

- Gossard, Ohio P. B. 354, 1914.
 Haimbach, Ent. News, 1907, 208.
 Herms, Cal. Cult., XLI, 290, 1913.
 Horne, Ind. Farm., Apr. 20, 1907, 7.
 Jackson, Col. Rur. World, Mar. 29, 1905, 103.
 Kaupp, Anim. Par. 25, 1905.
 O'Kane, Inj. Ins. 376, 1914.
 Ransom, U. S. Y. B., 1905, 144.
 Shaw, Or. Judd Farm., May 25, '07, 688.
 Surface, Pa. D. A. Zoöl. III, 1, 16, '13.
 Swingle, Wyo. B. 99, 4, 1913.
 Van Alstyne, Rur. N. Y., 1906, 487.
 Van Alstyne, Rur. N. Y., 1907, 471.
 Van Alstyne, Rur. N. Y., 1908, 159.
 Van Alstyne, Rur. N. Y., 1909, 427.
 Washburn, Minn. P. B. 22, 19, 1905.
 ——— Iowa Home., Feb. 9, 1905, 245.
 ——— Prai. Farm., Jan. 19, 1905, 2.
 ——— Prai. Farm., Feb. 9, 1905, 10.

Melophagus ovinus, parasite of

——— Jr. Infect. Dis., 1909, 98.

Memythrus asilipennis

Felt, N. Y. St. Mus. Mem. 8, 464, '06.

Memythrus dollii

Forbes, Ill. B. 151, 493, 1911.

Memythrus polistiformis

- Baldwin, Ind. Ent. R. 5, 114, 1912.
 Brooks, W. Va. B. 110, 19, 1907.
 Brooks, W. Va. R. f. 1907-1908, 23.
 Douglass, Ind. Ent. R. 3, 203, 1910.
 O'Kane, Inj. Ins. 231, 1914.
 Sanderson, Ins. Pests, 497, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 452, 1914.
 ——— U. S. Y. B., 1907, 547.

Memythrus simulans

Felt, N. Y. St. Mus. Mem. 8, 438, 1906.

Memythrus tricinctus

- Felt, N. Y. St. Mus. Mem. 8, 471, 1906.
 Forbes, Ill. B. 151, 493, 1911.
 Forbes, Ill. Ent. R. 26, 31, 1911.

Menopon biserialum

- Banks, U. S. C. 92, 7, 1907.
 Ewing, Ore. Coll. B. 92, 10, 1913.
 Kaupp, Colo. B. 185, 5, 1912.
 Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 126, 1911.

Menopon pallidum

- Banks, U. S. C. 92, 4, 1907.
 Bell, U. S. F. B. 287, 47, 1907.
 Bentley, Tenn. Bd. Ent. R. f. '13, 31.
 Black, O. Farm., Oct. 12, 1912, 333.
 Couch, O. Farm., June 11, 1910, 722.
 Dean, Kans. Farm., Feb. 4, 1911, 26.
 Elford, Farm & Dairy, Can., Aug. 19, 1909, 9.
 Ewing, Ore. Coll. B. 92, 8, 1913.
 Koethen, Cal. Cult., XLI, 267, 1913.
 Metcalf, Cal. Cult., XXXIII, 134, 1909.
 Pearl, Me. R. 29, App. Poultry, 67, '14.
 Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 126, 1911.
 Pierce, S. W. Stockm., Oct. 15, 1909, 4.
 Slingerland Rur. N. Y., 1906, 455.
 Surface, Pa. D. A. Zoöl. III, 1, 29, 1913.
 Washburn, Minn. P. B. 22, 26, 1905.
 Wood, O. Farm., June 1, 1907, 576.
 Woods, Kans. Bd. Agr. Quar. R., vol. XXVII, 107, 213, 1908.
 ——— Rur. N. Y., 1907, 694, 808.
 ——— Rur. N. Y., 1909, 312.

Merchant grain-beetle, see *Silvanus mercator***Mercuric chlorid**

Howard, U. S. B. 88, 39, 1910.

Mermis albicans

- Chittenden, U. S. C. 62, 3, 1905.
 Chittenden, U. S. C. 62, Rev. Ed., 1, '08.
 Howard, U. S. R. Ent., 1905, 289.
 Pettit, Mich. B. 233, 174, 1906.
 Symons, U. S. B. 60, 84, 1906.

Merisus destructor

- Felt, N. Y. R. 28, 39, 1913.
 Webster, U. S. C. 70, 12, 1906.

Merisus mordellisteneae

Phillips, U. S. B. 95, 9, 1911.

Merodon equestris

- Childs, Cal. Hort. B. III, 2, 73, 1914.
 Hewitt, Ont. Ent. Soc. R. 41, 28, '11.
 Norman, Pr. Ent. Soc. B. C., 1, 22, '11.
 Treherne, Pr. Ent. Soc. B. C., 4, 31, '14.

Meromyza americana

- Criddle, Nor'-West Farm., Dec. 20, 1907, 1157.
 Criddle, J. Ec. Ent. IV, 236, 1911.
 Criddle, Ont. Ent. Soc. R. 43, 98, 1913.
 Dean, Kans. Agr. Educ. I, 4, 39, 1909.
 Douglass, Ind. Ent. R. 4, 228, 1912.
 Fletcher, Can. Exp. Farms B. 52, 14, '05.

- Fletcher, Farm. Advocate, Can., 1907, 1824.
 Gibson, Ont. Ent. Soc. R. 40, 10, 1910.
 Gibson, Ont. Ent. Soc. R. 41, 12, 1911.
 Lochhead, Syn. Ec. Ent. 89, 1914.
 O'Kane, Inj. Ins. 131, 1914.
 Pettit, Mich. B. 258, 313, 1910.
 Sanderson, Ins. Pests, 132, 1912.
 Swenk, Nebr. Bd. Agr. R. f. 1910, 363.
 Swenk, Nebr. Ent. B. 1, 65, 1913.
 Washburn, Minn. R. 10, 107, 1905.
 Washburn, U. S. B. 52, 56, 1905.
 Washburn, Minn. R. 14, 45, 1912.
 ——— U. S. Y. B., 1905, 634.
- Meromyza pratorum**
 ——— U. S. Y. B., 1908, 568.
- Meropus sp. on codling moth**
 Doten, Nev. B. 66, 36, 1908.
- Mesochorus agilis**
 Paddock, J. Ec. Ent. V, 442, 1912.
- Mesochorus americanus**
 Quaintance & Brues, U. S. B. 50, 122, 1905.
- Mesochorus electilis**
 Sanderson, U. S. B. 57, 13, 1906.
- Mesochorus nigripes**
 Webster, U. S. B. 112, 38, 1912.
- Mesochorus nigrisignis**
 Webster, J. Ec. Ent. V, 336, 1912.
- Mesochorus pallipes**
 Howard & Fiske, U. S. B. 91, 263, 1911.
- Mesocrina pegomyiae**
 Washburn, Minn. R. 12, 132, 1908.
- Mesogramma politum**
 Forbes, Ill. Ent. R. 23, 162, 1905.
- Mesoleius tenthredinis**
 Hewitt, Can. Exp. Farms Ent. B. 5, 25, 1912.
- Mesoleuca truncata**
 Treherne, Can. Exp. Farms Ent. B. S, 43, 1914.
- Mestobregma kiowa**
 Bruner, U. S. B. 54, 64, 1905.
- Metachaeta helymus**
 Webster, J. Ec. Ent. IV, 181, 1911.
- Metachroma luridum**
 ——— U. S. Y. B., 1905, 636.
- Metachroma marginalis**
 Felt, N. Y. St. Mus. Mem. 8, 682, '06.
- Metadexia basalis**
 Brooks, W. Va. R. f. 1909-1910, 190.
 Brooks, W. Va. B. 128, 182, 1910.
- Metadontis amoena**
 Sanderson, U. S. B. 57, 42, 1906.
- Metapodius femoratus**
 Sanderson, U. S. B. 57, 47, 1906.
- Metallus rubi**
 Caesar, Ont. Ent. Soc. R. 43, 82, 1913.
 Crosby, J. Ec. Ent. V, 403, 1912.
 O'Kane, Inj. Ins. 310, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 317, 1914.
- Meteorus archipsidis**
 Gill, U. S. B. 116, 102, 1913.
- Meteorus hyphantriae**
 Sanderson, Ins. Pests, 557, 1912.
 Smith, Nebr. Ins. Pest Bur. C. 5, 3, '08.
 Swenk, Nebr. Ins. Pest. Bur. C. 6, 4, '08.
- Meteorus japonicus**
 Howard & Fiske, U. S. B. 91, 190, '11.
- Meteorus pulchricornis**
 Howard & Fiske, U. S. B. 91, 190, '11.
- Meteorus sp. on beet caterpillar**
 Marsh, U. S. B. 127, 17, 1913.
- Meteorus versicolor**
 Britton, Conn. B. 182, 20, 1914.
 Burgess, U. S. F. B. 564, 11, 1914.
 Howard, U. S. R. Ent., 1911, 9.
 Howard, Mass. For. R. 8, 89, 1912.
 Howard, Mass. For. R. 9, 73, 1912.
 Howard, U. S. R. Ent., 1912, 11.
 Howard, U. S. R. Ent., 1914, 3.
 Howard & Fiske, U. S. B. 91, 190, 262, 286, 1911.
- Meteorus vulgaris**
 Chittenden & Marsh, U. S. B. 109, 31, 1912.
 Sanderson, U. S. B. 57, 10, 1906.
- Metzneria lapella**
 Gibson, Ott. Nat. XXVIII, 96, 1914.
- Mexican bean weevil, see** *Spermophagus pectoralis*
- Mexican cotton boll weevil, see** *Anthonomus grandis*
- Mexican gadfly, see** *Tabanus mexicanus*
- Mexican Hair Tonic and Nit Killer**
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 5, p. 77, 1914.
- Mexican katydid, see** *Scudderella mexicana*
- Mexican wax scale, see** *Ceroplastes ceriferus*
- Microbracon, see** *Bracon*
- Microcentrum laurifolium**
 Essig, Cal. Hort. B. II, 1-2, 21, 1913.

- Microcentrum retinervis**
 ——— C. Gentl., 1908, 984.
- Microdontomerus anthonomi**
 Hunter & Pierce, U. S. B. 114, 141, '12.
 Pierce, J. Ec. Ent. I, 119, 1908.
 Pierce, U. S. B. 73, 28, 1908.
 Pierce, U. S. B. 73, 32, 1908.
 Pierce, U. S. B. 100, 49, 1912.
- Microdus laticinctus**
 Hammar, U. S. B. 80, 41, 1909.
- Microdus inediis**
 Marsh, U. S. B. 127, 17, 1913.
- Microgaster auripes**
 Webster, J. Ec. Ent. IV, 181, 1911.
 Webster, J. Ec. Ent. V, 335, 1912.
- Micromus montanus**
 Felt, N. Y. St. Mus., Mem. 8, 697, '06.
- Microparsus variabilis**
 Johannsen, Me. B. 177, 30, 1910.
- Micrope sp. on codling moth**
 Doten, Nev. B. 66, 36, 1908.
- Microrophala vittata**
 Britton, Conn. R. S. 844, 1909.
- Microplitis alaskensis**
 Hyslop, U. S. B. 95, 115, 1912.
- Microplitis catalpae**
 Howard & Chittenden, U. S. C. 96, 5, 1907.
- Microplitis melianae**
 Webster, J. Ec. Ent. V, 335, 1912.
- Microplitis nigripennis**
 Quaintance & Brues, U. S. B. 50, 121, 1905.
- Microterys flavus**
 Timberlake, J. Ec. Ent. VI, 295, 1913.
- Microterys sp.**
 Patch, Me. B. 121, 171, 1905.
- Microtoma atrata**
 Forbes, Ill. Ent. R. 23, 198, 1905.
- Microweisla misella**
 Britton, Conn. B. 165, 15, 1909.
 Britton, Conn. B. 181, 8, 1914.
 Burgess & Collins, U. S. Y. B., '11, 458.
 Caesar, Ont. Agr. Coll. B. 219, 17, 1914.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 33, 1906.
 Cordley, Oreg. B. 88, 11, 1906.
 Ewing, Oreg. B. 121, 64, 1914.
 Fernald, Mass. B. 116, 6, 1907.
 Hayhurst, Ark. B. 107, 377, 1911.
 Marlatt, U. S. B. 62, 57, 63, 1906.
 Quaintance, U. S. C. 124, 9, 1910.
- Smith, N. J. R. f. 1904, 558, 584, 1905.
 Smith, U. S. B. 52, 77, 1905.
 Smith, N. J. R., 1906, 529.
 Symons, Md. B. 101, 197, 1905.
 Taylor, Mo. Fr. Exp. Sta. B. 18, 28, '08.
 Tower, J. Ec. Ent. VII, 431, 1914.
- Migratory locust**, *see* *Melanoplus spretus*
- Military bug**, *see* *Hadromena militaris*
- Milkweed aphid**, *see* *Aphis nerii*
- Mill insects**
 Chittenden, Amer. Miller, Sept. 1, 1912, 707.
- Millipedes**
 Slingerland, Rur. N. Y., 1906, 892.
- Milyas cinctus**
 Webster, U. S. B. 69, 60, 1907.
 Webster, U. S. C. 113, 11, 1909.
- Mimms culicidæ**
 Howard, U. S. B. 88, 33, 1910.
- Mimorista flavidisimilis**
 Hunter, Pratt & Mitchell, U. S. B. 113, 20, 1912.
- Mindarus abietinus**
 Patch, Me. B. 182, 243, 1910.
 Patch, Me. B. 187, 20, 1911.
 Patch, Me. B. 202, 160, 1913.
- Mineola indigenella**
 Baldwin, Ind. Ent. R. 5, 70, 1912.
 Britton, Conn. R. 11, 342, 1912.
 Crandall, Ill. Hort. Soc. f. 1911, 341, '12.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 45, 1913.
 Douglass, Ind. Ent. R. 2, 64, 1910.
 Douglass, Ind. Ent. R. 3, 119, 1910.
 Garman, Ky. B. 133, 19, 1908.
 Gossard, Ohio B. 164, 17, 1905.
 Gossard, Ohio B. 198, 42, 1908.
 Gossard, Ohio B. 233, 110, 1911.
 Haseman, Mo. Hort. Soc., 1911, 238.
 Lochhead, Syn. Ec. Ent. 52, 1914.
 Moore, Wis. B. 190, 20, 1910.
 O'Kane, Inj. Ins. 297, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 68, 1914.
 Stedman, Mo. Hort. Soc., 1905, 54.
 Swenk, Nebr. Hort. Soc., 1908, 146.
 Swenk, Nebr. Hort. Soc., 1909, 76.
 Williams, Nebr. Farm., June 7, '06, 507.
- Mineola vacciniæ**
 Franklin, Mass. B. 115, 3, 1907.
 Franklin, Mass. B. 126, 1, 1908.

- Franklin, Wis. Cranb. Grow. Assoc.,
22nd Meet., 31, 1909.
Franklin, Mass. R. 25, I, 226, 1913.
Franklin & Morse, Mass. B. 150, 55, '14.
Hardenburg, Wis. Cranb. Grow. Assoc.,
20th Meet., 4, 1907.
Hardenburg, Wis. B. 159, 19, 1908.
Hardenburg, & Malde, Wis. R. 24, 311,
1907.
O'Kane, Inj. Ins. 326, 1914.
Peltier, Wis. Cranb. Grow. Assoc.,
25th Meet., 10, 1912.
Slingerland & Crosby, Man. Fr. Ins.
466, 1914.
Smith, N. J. R., 1905, 576.
Whitson, Sandsten, Haskins & Ramsey,
Wis. B. 119, 43, 1905.
—— U. S. Y. B., 1908, 576.
- Minnesota fly trap**
Washburn, J. Ec. Ent. V, 400, 1912.
Washburn, Minn. C. 24, 1912.
Washburn, Minn. C. 26, 1913.
- Minnnows against mosquitoes**
Seal, N. J. R., 1906, 653.
Smith, N. J. R., 1907, 541.
- Minute false chinch bug, see Nysius minutus**
- Minute oak bark-beetle, see Pityophthorus minutissimus**
- Minute spruce bark-beetle, see Crypturgus atomus**
- Mirax grapholithae**
Foster & Jones, U. S. B. 80, 50, 1909.
Quaintance, U. S. B. 68, 60, 1908.
- Miris affinis**
Titus, Utah B. 110, 50, 1910.
- Miscible oil, see oils**
- Modoc Concentrated Lime Sulphur Solution**
—— U. S. D. A. Ins. & Fung. Bd., Ins.
1, p. 23, 1914.
- Monarthropalpus buxi**
Felt, J. Ec. Ent. III, 342, 1910.
Fernald, Mass. R. 25, II, 86, 1913.
Fernald, Mass. R. 26, I, 56a, 1914.
- Monarthrum fasciatum**
Gahan, Md. Hort. Soc., 1905, 81,
1906.
Garman, Ky. B. 120, 70, 1905.
Gossard, J. Ec. Ent. IV, 206, 1911.
Gossard, Ohio B. 264, 61, 1913.
Gossard, Ohio C. 140, 11, 1914.
- Monarthrum mali**
Felt, N. Y. St. Mus. Mem. 8, 289, 1905.
Garman, Ky. B. 120, 70, 1905.
Gossard, Ohio B. 264, 62, 1913.
Gossard, Ohio C. 140, 12, 1914.
- Monedula carolina**
Hine, La. Crop Pest Comm. C. 6, 20, '06.
Hine, La. B. 93, 13, 1907.
- Moneilema crassum**
Hunter, Pratt & Mitchell, U. S. B. 113,
13, 1912.
- Moneilema ulkei**
Hunter, Pratt & Mitchell, U. S. B. 113,
13, 1912.
- Monellia californicus**
Davidson, U. S. D. A. B. 100, 34, 1914.
Essig, Cal. Hort. B. II, 1-2, 81, '13.
- Monellia caryae**
Davidson, U. S. D. A. B. 100, 19, 1914.
Gillette, J. Ec. Ent. III, 367, 1910.
- Monellia caryella**
Davidson, U. S. D. A. B. 100, 26, 1914.
Smith, U. S. B. 67, 105, 1907.
- Monellia maculella**
Gillette, J. Ec. Ent. III, 368, 1910.
- Monellia marginella**
Gillette, J. Ec. Ent. III, 368, 1910.
- Monocesta coryli**
Howard, U. S. B. 54, 81, 1905.
Welden, J. Ec. Ent. I, 147, 1908.
Weldon, Md. Hort. Soc., 1907, 62, 1908.
—— U. S. Y. B., 1907, 550.
- Monocrepidius vespertinus**
Conradi & Eagerton, S. C. B. 179, 3, '14.
Hinds, Ala. Poly. B. 146, 102, 1909.
Quaintance & Brues, U. S. B. 50, 127,
1905.
Sanderson, U. S. F. B. 223, 21, 1905.
Sherman, N. C. Dept. Agr. B., 29, 6,
52, 1908.
- Monodontomerus aereus**
Fiske, Mass. For. R. 6, 91, 1910.
Howard, Mass. For. R. 7, 96, 1911.
Howard, U. S. R. Ent., 1911, 9.
Howard, Mass. For. R. 8, 89, 1912.
Howard, U. S. R. Ent., 1912, 10.
Howard, Mass. For. R. 10, 85, 1913.
Howard, Ann. Ent. Soc. Am. VII, 88,
1914.
Howard & Fiske, U. S. B. 91, 160, 213,
245, 262, 1911.
Johannsen, Me. B. 207, 455, 1912.

- Johannsen & Patch, Me. B. 195, 243, '11.
Tothill, Ent. Soc. Ont. R. 43, 58, 1913.
- Monohammus confusor**
Felt, N. Y. St. Mus. Mem. 8, 360, '06.
- Monohammus marmoratus**
Felt, N. Y. St. Mus. Mem. 8, 366, '06.
- Monohammus scutellatus**
Felt, N. Y. St. Mus. Mem. 8, 364, '06.
Johannsen, Me. B. 177, 41, 1910.
Patch, Me. B. 162, 362, 1908.
Pettit, Mich. Farm., July 29, 1911, 84.
Swaine, Ont. Ent. Soc. R. 43, 90, 1913.
- Monohammus sp.**
Walker, Ent. Soc. Ont. R. 42, 59, 1912.
- Monohammus titillator**
Buttrick, J. Ec. Ent. V, 458, 1912.
Felt, N. Y. St. Mus. Mem. 8, 365, 1906.
Patch, Me. B. 162, 362, 1908.
Webb, U. S. B. 58, 41, 1909.
Webb, U. S. Y. B., 1910, 346.
—— Amer. Lumberman, July 15, '11, 48.
—— U. S. Y. B., 1908, 574.
- Monomorium minimum**, *see* **M. minutum**
- Monomorium minutum**
Ainslie, U. S. B. 85, 93, 1910.
Bishopp, U. S. C. 170, 9, 1912.
Dietz, Ind. Ent. R. 5, 171, 1912.
Felt, N. Y. St. Mus. B. 129, 31, 1909.
Felt, N. Y. St. Mus. B. 136, 36, 1912.
Forbes, Ill. Ent. R. 23, 157, 1905.
Herrick, Household Ins. 176, 1914.
Hunter & Pierce, U. S. B. 114, 140, '12.
Marlatt, U. S. B. 62, 57, 1906.
Marlatt, U. S. C. 34, 2nd Ed., 2, 1907.
Newell & Barber, U. S. B. 122, 61, 1913.
O'Kane, Inj. Ins. 351, 1914.
Pierce, U. S. B. 100, 70, 1912.
Vickery, U. S. B. 85, 116, 1910.
Whitmarsh, Ohio B. 253, 121, 1912.
- Monomorium pharaonis**
Dietz, Ind. Ent. R. 5, 171, 1912.
Felt, N. Y. St. Mus. B. 129, 30, 1909.
Felt, N. Y. St. Mus. B. 136, 35, 1912.
Forbes, Ill. Ent. R. 23, 157, 1905.
Herrick, Household Ins. 174, 1914.
Hood, Mass. C. 7, 1907.
Hunter & Pierce, U. S. B. 114, 140, '12.
Lochhead, Syn. Ec. Ent. 100, 1914.
Marlatt, U. S. C. 34, 2nd Ed., 1, 1907.
O'Kane, Inj. Ins. 351, 1914.
Pierce, U. S. B. 100, 71, 1912.
- Smith, N. J. B. 203, 10, 1907.
Smith, N. C. R. 32, 32, 1909.
Still, C. Gentl., Aug. 10, 1912, 12.
Washburn, U. S. B. 60, 86, 1906.
Washburn, U. S. B. 67, 16, 1907.
Whitmarsh, Ohio B. 253, 121, 1912.
- Monophadnoides rubi**
Britton, Conn. R. 8, 846, 1909.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 116, 1913.
Gossard, Ohio B. 198, 74, 1908.
Lochhead, Ont. Ent. Soc. R. 35, 29, '05.
Nicholson, Okla. B. 69, 16, 1905.
O'Kane, Inj. Ins. 287, 1914.
Sanderson, Ins. Pests, 472, 1912.
Slingerland & Crosby, Man. Fr. Ins. 319, 1914.
Surface, Pa. D. A. Zool. III, 1, 9, 1913.
- Monophadnus caryae**
Felt, N. Y. St. Mus. Mem. 8, 536, 1906.
- Monophadnus rubi**, *see* **Monophadnoides**
- Monoptilota nubilella**
O'Kane, Inj. Ins. 136, 1914.
Welden, J. Ec. Ent. I, 148, 1908.
Weldon, Md. Hort. Soc., 1907, 60, 1908.
- Monostegia ignota**
Baldwin, Ind. Ent. R. 5, 121, 1912.
Quayle, J. Ec. Ent. IV, 525, 1911.
Sanderson, Ins. Pests, 451, 1912.
Webster, J. Ec. Ent. V, 471, 1912.
- Monostegia rosae**
Bruner, Nebr. Ent. R. f. 1907-1908, 10.
Cooley, Mont. B. 64, 41, 1906.
Swenk, Nebr. Hort. Soc. B. 19, 20, 1908.
Swenk, Nebr. Hort. Soc., 1909, 91.
—— U. S. Y. B., 1905, 635.
- Monosulfide sulfur**
Harris, Mich. Tech. B. 6, 375, 1911.
- Monoxia consputa**
Chittenden, Ins. Inj. Veg., 123, 1907.
- Monoxia puncticollis**
Chittenden, Ins. Inj. Veg., 122, 1907.
Cooley, Mont. R. 12, 258, 1914.
O'Kane, Inj. Ins. 147, 1914.
Sanderson, Ins. Pests, 337, 1912.
—— U. S. Y. B., 1905, 630.
- Monterey pine aphid**, *see* **Essigella californica**
- Monterey pine scale**, *see* **Physokermes insignicola**
- Monterey pine twig-beetle**, *see* **Pityophthorus puncticollis**

- Moore's Hog Remedy**
 ——— U. S. D. A. Ins. & Fung. Bd.,
 Ins. 3, p. 42, 1914.
- Mordella borealis**
 Felt, N. Y. St. Mus. Mem. 8, 672, '06.
- Mordella octopunctata**
 Felt, N. Y. St. Mus. Mem. 8, 433,
 1906.
- Mordellistena ustulata**
 Phillips, U. S. B. 95, 1, 1911.
 ——— U. S. Y. B., 1905, 634.
 ——— U. S. Y. B., 1908, 570.
- Mormon cricket**, *see* **Anabrus simplex**
- Mosquitocide**, *see* **Culicide**
- Mosquitoes**
 Aaron, C. Gentl., May 2, 1914, 898.
 Ayers, Jr. Med. Soc. N. J., VII, 340, '11.
 Bath, Ill. Med. Jr., VI, 638, 1905.
 Booker, N. C. Bd. Health Sp. B. 11, 12,
 1912.
 Booker, N. Car. Health Bd. Bull.
 XXVII, 126, 141, 1912.
 Britton, Amer. Cult., June 3, 1905, 2.
 Britton, Conn. R. 7, 318, 1908.
 Britton, Conn. R. 8, 800, 1909.
 Britton, Conn. R. 9, 362, 1910.
 Britton, Conn. B. 173, 1912.
 Britton, J. Ec. Ent. VI, 89, 1913.
 Britton, Conn. R. 12, 259, 1913.
 Britton, R. Mosq. Control Civic Fed.,
 New Haven, Conn. No. 10, 1913, 26.
 Britton, Conn. R. 13, 242, 1914.
 Britton & Viereck, Conn. R. 4, 253, '05.
 Britton & Viereck, Conn. R. 5, 214, '06.
 Buttrick, R. Mosq. Control Civic Fed.,
 New Haven, Conn. No. 10, 1913, 10.
 Byrd, N. Orl. Med. Surg. Jr., LXVII,
 14, 1914.
 Campbell, Mil. Surg., XXIV, 308, 1909.
 Coffin, Johns Hopkins Hosp. Bull. XVII
 35, 1906.
 Conradi, Tex. Stockm. Farm., Mar. 7,
 1906, 6.
 Craig, Mil. Surg. XXVI, 292, 1910.
 Doane, Ins. Disease, 76, 1910.
 Doty, Amer. Publ. Health Assoc. R.
 XXX, 50, 1905.
 Doty, Jr. Amer. Med. Assoc. XLV, 585,
 1905.
 Doty, Med. Rec., LXVII, 90, 1905.
 Doty, Amer. Jr. Med. Sci., CXXXI,
 187, 1906.
- Doty, Amer. Publ. Health Assoc.,
 XXXII, 44, 1907.
 Doty, The Mosquito, N. Y., Appleton
 Co., 1912.
 Douglass, Ind. Ent. R. 1, 164, 1908.
 Dupree, New Orl. Med. Surg. Jr., v. 58,
 July 1905.
 Dupuy, Va. Med. Semi-Monthly, XII,
 25, 1907.
 Eaton, First R. Atlantic Co. Mosq. Ex-
 term, Conn. 1913.
 Eberle, N. Y. Med. Jr., LXXXI, 848,
 1905.
 Faget, N. Orl. Med. Surg. Jr., LIX, 253,
 1906.
 Felt, Amer. Mosq. Exterm. Soc. Y. B. f.
 1904-1905, 34, 1906.
 Felt, N. Y. R. 21, 109, 1906.
 Felt, Pr. 2nd Anti-Mosq. Conv. N. Y.
 City, 1906, p. 34.
 Felt, Atti Soc. Studi Mal., XI, 75, 1910.
 Felt, Trans. Am. Soc. Civil Eng., 1912,
 771.
 Felt, N. Y. R. 28, 106, 1913.
 Frick, Jr. Mo. Med. Assoc., IV, 81, '07.
 Gahan, Md. B. 109, 108, 1906.
 Goldberger, Pub. Health R. XXIII,
 1007, 1908.
 Goodhue, St. Louis Med. Rev., LVII,
 1, 1908.
 Gorgas, Amer. Mosq. Exterm. Soc. Y.
 B. f. 1904-1905, 31, 1906.
 Gray, Amer. Jr. Publ. Health VIII, 452,
 1912.
 Headlee, N. J. R., 1912, 457.
 Headlee, Hahnemann Monthly, 1913,
 762.
 Headlee, J. Ec. Ent. VII, 260, 1914.
 Herrick, Household Ins. 84, 1914.
 Howard, Osler's Mod. Med., I, 389, '07.
 Howard, U. S. B. 88, 7, 1910.
 Howard, Atti Soc. Studi Mal., XI, 67,
 1910.
 Howard, U. S. F. B. 444, 5, 1911.
 Howard, U. S. F. B. 450, 9, 1911.
 Howard, Bull. Ill. Bd. Health, VIII, 241,
 1912.
 Howard, Dyar & Knab, Mosquitoes N.
 Cent. Amer. & W. Ind., I, 1913.
 Hughes, St. Louis Med. Rev., LII, 457,
 1905.
 Hurley, Pac. Med. Jr., XLVIII, 338, '05.

Mosquitoes (*Cont'd*)

- Knab & Busck, Amer. Jr. Trop. Dis. II, 333, 1914.
- Kohnke, Sci. Amer. Suppl., LIX, 24, 328, 1905.
- Kohnke, Amer. Mosq. Exterm. Soc. Y. B. f. 1904-1905, 77, 1906.
- Kohnke, Bull. N. Car. Bd. Health, XX, 134, 1906.
- Larkin, Ohio Med. Jr., II, 226, 1906.
- Levenson, Med. Advance, XLIV, 67, '06.
- Mason, O. Farm., Mar. 21, '14, p. 418.
- McCaw, Jr. Amer. Med. Assoc., XLV, 1100, 1905.
- McGibbon, Montreal Med. Jr., XXXV, 513, 1906.
- Miller, Pr. Am. Soc. Civil Engin. XXXVIII, 1567, 1912.
- Mitchell, Mosq. Life, N. Y., 1907.
- Munroe, Tex. Med. News, XIV, 558, 1905.
- Newell, La. Plant., May 22, 1909, 323.
- O'Kane, Inj. Ins. 350, 1914.
- Orenstein, Amer. Jr. Pub. Health, IX, 106, 1913.
- Pribble, South. Med. Surg. Jr., IV, 180, 1905.
- Rosenau, Prevent. Med., 200, 1912.
- Sexton, Ala. Med. Jr., XVIII, 365, '06.
- Smith, N. J. R., 1905, 655.
- Smith, Science, XXI, 266, 1905.
- Smith, Pop. Sci. Monthly, LXVI, 281, 1905.
- Smith, N. J. R., 1906, 613.
- Smith, Amer. Mosq. Exterm. Soc. Y. B. f. 1904-5, 65, 1906.
- Smith, Rur. N. Y., 1906, 455.
- Smith, N. J. B. 207, 1907.
- Smith, N. J. R., 1907, 481.
- Smith, Pop. Sci. Monthly, LXX, 325, 1907.
- Smith, Science, XXV, 311, 1907.
- Smith, N. J. R., 1908, 381.
- Smith, N. J. R., 1909, 421.
- Smith, N. J. R., 1910, 377.
- Smith, N. J. R., 1911, 505.
- Smith, 7th Intern. Zoöl. Congr., Boston, f. 1907, 662, 1912.
- Stiles, Pub. Health R. XXIX, 2301, '14.
- Surface, Pa. D. A. Zoöl. V, 12, 388, '08.
- Symons, Md. Hort. Soc., 1907, 143, 1908.
- Taylor, Jr. Amer. Med. Assoc., XLV, 90, 1905.
- Taylor, Va. Med. Semi-Monthly, Jan. 11, 1907, 460.
- Theard, N. Orl. Med. Surg. Jr., LIX, 352, 1906.
- Veazie, Science, XXIII, 407, 1906.
- Vermeule, Amer. Mosq. Exterm. Soc. Y. B. f. 1904-1905, 102, 1906.
- Voorhees, N. J. Bd. Agr. R. 35, 45, 1908.
- Wainwright, Amer. Therapist., XIII, 229, 1905.
- Walters, Jr. Med. Soc. N. J., VII, 393, 1911.
- Washburn, Minn. R. 10, 41, 1905.
- Doty, N. Y. State Jr. Med., VIII, 225, 1908.
- Weeks, Amer. Med., Mar. 3, 1906, 320.
- Weeks, Mosq. Millburn Township, N. J., 1906.
- Weeks, Science, XXIII, 379, 1906.
- Wellman, Jr. Amer. Med. Assoc. LV, 217, 1910.
- White, Bost. Med. Surg. Jr., CLIII, 749, 1905.
- Whitmarsh, Ohio, B. 253, 112, 1912.
- Woodworth & Foster, Pac. Rur. Press, LXIX, 367.
- Wyckoff, Jr. Med. Soc. N. J., II, 109, 1905.
- Bd. Health, Lawrence, L. I., '10.
- First R. Hudson Co. Mosq. Exterm. Comm., 1913.
- First Ann. R. Mosq. Exterm. Com. Union Co., N. J., 1912.
- Jr. Amer. Med. Assoc. XLVIII, 865, 1906.
- Jr. Amer. Med. Assoc. LX, 1245, 1913.
- Pac. Rur. Press, LXXII, 1, '06.
- Rept. Essex Co. (N. J.) Mosq. Exterm. Com., 1913.
- Second R. Mosq. Exterm. Com. Union Co., N. J., 1913.

Mosquitoes and Azolla

Smith, Ent. News, 1910, 437.

Mosquitoes and disease

- Demaree, Ind. Farm., July 27, '07, 13.
- Evans, Pr. Columbus Hort. Soc., 1906, 120.
- Howard, Osler's Mod. Med., I, 370, '07.
- Howard, U. S. B. 78, 1909.

- Knab, Science, XXXVII, 147.
 Lewis, Prog. Farm., July 5, 1906, 5.
 Ludlow, Bull. 4, Off. Surg. Gen., War Dept., 1914.
 Mitchell, Mosq. Life, N. Y., 83, 1907.
 Stevens, Prog. Farm., May 7, '10, 408.
 Taylor, Jr. Amer. Med. Assoc. XLV, 90, 1905.
 Wyman, Pub. Health R. XX, 1555, '05.
- Mosquitoes and ducks**
 ——— Rur. N. Y., 1909, 567.
- Mosquitoes and electric fan**
 Arnold, Amer. Med. X, 264, 1905.
- Mosquitoes, fish against**
 McMillan, Amer. Jr. Pub. Health, VIII, 707, 1912.
- Mosquitoes and fish**
 Quayle, Cal. B. 178, 26, 1906.
 Seal, Sci. Amer. Suppl., LXV, 351, 1908.
See also minnows.
- Mosquitoes and pellagra**
 Roberts, Trans. Nat'l Assoc. Study Pellagra, II, 291, 1912.
 Roberts, Amer. Jr. Med. Sci., Aug. 1913, 233.
- Mosquitoes and sewage**
 Knab & Busck, Amer. Jr. Trop. Dis., Nov. 1914, 333.
- Mosquitoes and shrimps**
 Britton & Viereck, Conn. R. 4, 307, '05.
- Mosquitoes and surra**
 Mitzmain, Bull. 94, Publ. Health Hyg. Lab., 20, 1914.
- Mosquito breeding cage**
 Price, Jr. Infect. Dis., May, 1907, 123.
- Mosquitoes, freezing of**
 Smith, Can. Ent., 1907, 119.
- Mosquitoes, larvae**
 Dyar, U. S. C. 72, 1906.
- Mosquitoes, legislation**
 Britton, Conn. R. 13, 242, 1914.
 Cravath, Amer. Mosq. Exterm. Soc. Y. B. f. 1904-1905, 22, 1906.
 Headlee, N. J. R., 1912, 487.
- Mosquitoes, net, Grayson's**
 Grayson, Milit. Surg., XVIII, 191, 1906.
- Mosquitoes, oiling apparatus**
 Smith, N. J. R., 1910, 395.
- Mosquitoes, pyrofume for, see Pyrofume**
- Mosquitoes of Arkansas**
 Thibault, Pr. Ent. Soc. Wash. XII, 13, 1910.
- Mosquitoes of California**
 Quayle, Cal. B. 178, 1906.
- Mosquitoes of Chicago**
 Gerhard, Ent. News, 1910, 293.
- Mosquitoes of Connecticut**
 Britton & Viereck, Conn. R. 4, 253, '05.
- Mosquitoes of Florida**
 Byrd, Med. News, LXXXVI, 1057, '05.
- Mosquitoes of Louisiana**
 Dupres, N. Orl. Med. Surg. Jr., LVIII, 1, 1905.
- Mosquitoes of Maine**
 Patch, Me. B. 134, 225, 1906.
- Mosquitoes of Minnesota**
 Taylor, St. Paul Med. Jr., July '10, 329.
- Mosquitoes of New Jersey**
 Brehme, N. J. R., 1912, 497.
 Brehme, Ent. News, 1913, 242.
 Smith, Ont. Soc. Ent. R. 36, 34, 1906.
 Smith, Ann. R. N. J. Exp. Sta., 1905-'10.
 ——— Rur. N. Y., 1908, 645, 661, 679.
- Mosquitoes of New Orleans**
 Wellman & King, Amer. Journ. Trop. Dis., Oct. 1913, 267.
- Mosquitoes of New York**
 Felt, N. Y. R. 20, 442, 1905.
- Mosquitoes of Ohio**
 Evans, Pr. Columbus Hort. Soc., 1906, 117.
- Mosquitoes of Saskatchewan**
 Knab, Smith's Misc. Coll., L. 540, 1908.
- Mosquitoes of South Carolina**
 Conradi, U. S. B. 52, 68, 1905.
- Mosquitoes of United States**
 Ludlow, Med. Record, Jan. 26, '06, 95.
- Mottled tortoise beetle, see Coptocycla signifera**
- Mountain pine beetle, see Dendroctonus monticolae**
- Mt. Hood Whale Oil Soap**
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 6, p. 89, 1914.
- Mourning-cloak butterfly, see Euvanessa antiope**
- Muck beetle, see Ligyrus gibbosus**
- Murgantia histrionica**
 Barre & Conradi, S. C. B. 141, 28, 1909.
 Bennett, Colo. B. 143, 7, 1909.
 Bentley, Tenn. Dept. Agr. Bien R., 1909-1910, 55.
 Bremner, Cal. Hort. Comm. Destr. Ins. 1910, 12.

Murgantia histrionica (*Cont'd*)

- Chandler, Mo. B. 102, 269, 1912.
 Chittenden, Ins. Inj. Veg., 148, 1907.
 ✓ Chittenden, U. S. C. 103, 1, 1908.
 Chittenden, Va. Truck Exp. Sta. B. 2, 39, 1909.
 Close & White, Md. B. 133, 195, 1909.
 Conradi, Tex. B. 89, 9, 1907.
 Cook, Cal. Cult., XXXIX, 201, 1912.
 Cooper, Cal. Hort. Comm. Ins. & Insect., 1905, 20.
 ✓ Corbett, U. S. F. B. 433, 10, 1911.
 Douglass, Ind. Ent. R. 1, 88, 1908.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 119, 1905.
 Essig, Cal. Hort. B. II, 1-2, 145, 1913.
 Felt, N. Y. R. 26, 53, 1911.
 Forbes, Ill. Ent. R. 23, 196, 1905.
 Fulton, Wright & Gregg, Pa. B. 110, 21, 1911.
 Garcia, N. Mex. B. 68, 10, 1908.
 Johnson, Farm & Ranch, Apr. 17, 1909, 11.
 Lane, Ala. Dept. Agr. (sep.)
 Lewis, Pr. Ga. Hort. Soc. f. 1912, 10.
 McHatton, South Cult., Sept. 15, 1909, 24.
 Morgan, Tenn. Bd. Ent. R. f. 1910, 55.
 Morrill, S. W. Stockm., Aug. 8, '13, 10.
 Morrill, S. W. Stockm., Dec. 5, '13, 11.
 Morrill, S. W. Stockm., Oct. 2, 1914, 8.
 Newell, Pr. La. Agr. Soc. 18, 43, 1905.
 Newell, La. Hort. Soc., 1908, 49.
 Newell, Tex. Stockm. Farm., July 15, 1914, 11.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 97, 1909.
 O'Kane, Inj. Ins. 191, 1914.
 Price, Va. C. 7, 57, 1909.
 Reed, Ga. Hort. Soc. f. 1914, 56.
 Sanborn, Okla. B. 100, 24, 1912.
 Sanderson, Ins. Pests, 368, 1912.
 Sherman, Ont. Ent. Soc. R. 36, 22, 1906.
 Sherman, Prog. Farm., Apr. 2, 1908, 17.
 Sherman, N. C. Dept. Agr. B., 32, 7, 17, 1911.
 Sherman, Prog. Farm., Apr. 19, '13, 523.
 Slingerland, Rur. N. Y., 1907, 360.
 Smith, Ga. Bd. Ent. B. 20, 171, 1906.
 Smith & Lewis, U. S. B. 60, 82, 1906.
 ✓ Smith, N. C. B. 197, 18, 1908.
 Smith, N. C. P. B. 19, 1908.

Smith, N. C. R. 31, 27, 1908.

Smith, N. J. R., 1911, 413.

(Smith, J. Ec. Ent. II, 108, 1909.

Smith, N. C. P. B. 20, 1909.

Smith, N. C. R. 32, 32, 1909.

Smith, N. J. R., 1911, 413.

Smith, Prog. Farm., June 8, 1912, 671.

Stoner, Ent. News, 1914, 132.

Surface, Pa. D. A. Zoöl. V, 12, 374, 1908.

Surface, Pa. D. A. Zoöl. I, 1, 21, 1911.

Symons, Md. B. 101, 187, 1905.

Worsham, J. Ec. Ent. II, 1909.

——— Pac. Rur. Press, LXXXVII, 449, 1914.

——— Rur. N. Y., 1905, 296.

——— U. S. Y. B., 1905, 629.

——— U. S. Y. B., 1906, 511.

——— U. S. Y. B., 1907, 544.

——— U. S. Y. B., 1908, 571.

Murky ground beetle, see Harpalus caliginos

Musca domestica

Aaron, C. Gentl., July 13, 1912, 12.

Ainslie, South. Cult., July 1, 1910, 4.

Ainslie, Prog. Farm., Apr. 22, 1911, 412.

Anderson, Amer. Publ. Health Assoc. R. f. 1908, XXXIV, 97, 1909.

Armstrong, Amer. Jr. Publ. Health, IV, 185, 1914.

Armstrong, N. Y. Bur. Public Health & Hygiene, Pub. 79, 1914.

Ball, Farm & Ranch, Aug. 22, 1914, 19.

Barlow, Joint B. R. I. Bd. Agr. & R. I. Agr. Coll. Exten. B. II, 3, 1912.

Beyer, N. Y. Med. Jr., Apr. 2, 1910, 677.

Bonney, Mich. Farm., July 20, 1912, 46.

Booker, N. C. Bd. Health, Sp. B. 11, 3, 1912.

Booker, Prog. Farm., June 2, 1913, 723.

Britton, Yale Med. Jr., XII, 750, 1906.

Britton, Conn. Farm., Sept. 16, '11, 10.

Britton, Conn. R. 11, 338, 1912.

Britton, Housefly as dis. car., Public Conn. Bd. Health, 1912.

Britton, Pop. Sci. Monthly, 1912, 36.

Britton, Sixth San. Confer. Health Off. Conn., 1912.

Brues, Am. Agric., June 11, 1910, 793.

Brues, Or. Judd Farm., June 11, '10, 940.

Bruner, Nebr. Ins. Pest Bur. C. 10, 1, 1908.

Musca domestica (*Cont'd*)

- Campbell & Cooper, Jr. Amer. Med. Assoc. LIII, 1160, 1909.
- Chambliss, S. C. Clemson Agr. Coll. Ext. Work, II, 5, 15, 1906.
- Chandler, N. Orl. Med. Surg. Jr., 1913, 102.
- Clark, S. D. Hort. Soc. 7th R., 170, '10.
- Cobb, Nat. Geog. Mag., XXI, 271, '10.
- Cobb, Bull. N. Car. Bd. Health, XXVI, 18, 1911.
- Conradi, S. C. C. 23, 5, 1913.
- Cook, U. S. D. A. B. 118, 1914.
- Cooley, Mont. Bd. Ent. Bien. R. 1, 32, 1914.
- Cooley, Mont. Pub. Health Dept. Sp. B. 1, 4, 1914.
- Dawson, Sci. Amer. Suppl., 1913, 102.
- Dawson, Sci. Amer., CXI, 28, 1914.
- Dickenson, Med. Record, Jan. 26, 1907, 134.
- Dietz, Ind. Ent. R. 5, 156, 1912.
- Dixon, Penna. Health B. 22, 1911.
- Doane, Ins. Disease, 57, 1910.
- Douglass, Ind. Ent. R. 2, 96, 1910.
- Douglass, Ind. Ent. R. 3, 211, 1910.
- Dutton, Jr. Amer. Med. Assoc., liii, 1248, 1909.
- Eccles, Med. Times, XXXVIII, 162, '10.
- Felt, C. Gentl., 1908, 830.
- Felt, J. Ec. Ent. II, 39, 1909.
- Felt, N. Y. St. Mus. B. 129, 7, 1909.
- Felt, N. Y. R. 24, 24, 1909.
- Felt, J. Ec. Ent. III, 24, 1910.
- Felt, N. Y. Med. Jr., Apr. 2, 1910, 685.
- Felt, N. Y. R. 25, 12, 1910.
- Felt, N. Y. St. Mus. B. 136, 6, 1912.
- Ficklin, N. Orl. Med. Surg. Jr., LX, 353, 1907.
- Freeman, South. Med. Jr., 1913, 360.
- Gaddis, Bull. Bd. Health, Ky., 1911, 12.
- Garrett, Tex. Med. Jr., XXV, 136, 1909.
- Gerhard, Farm. Guide, Sept. 16, '11, 14.
- Gillette, O. Farm., Dec. 18, 1909, p. 546.
- Hamilton, Ill. Med. Jr., June 1906, 582.
- Headlee, Kans. Agr. Educ. I, 3, 32, 1909.
- Hermes, Bull. Berkeley Bd. Health, 1909.
- Hermes, Cal. Journ. Tech. XIV, No. 2, 1909.
- Hermes, Cal. Cult. XXXIV, 35, 131, '10.
- Hermes, Cal. B. 215, 513, 1911.
- Hermes, Cal. Cult., XLI, 292, 1913.
- Herrick, Household Ins. 1, 1914.
- Hewitt, Ott. Nat. XXIV, 30, 1910.
- Hewitt, J. Ec. Ent. VII, 281, 1914.
- Hinds, Farm. Guide, May 18, 1912, 5.
- Hine, Nor'-West Farm., May 20, 1910, 643.
- Hodge, Nature & Culture, Cincinnati, 1912, Sep.
- Hodge, Science, XXXVIII, 512, 1913.
- Howard, U. S. C. 71, Rev. 1, 1906.
- Howard, U. S. R. Ent., 1906, 23.
- Howard, U. S. R. Ent., 1908, 28.
- Howard, U. S. B. 78, 23, 1909.
- Howard, U. S. R. Ent., 1909, 34.
- Howard, U. S. R. Ent., 1910, 33.
- Howard, Bull. Ill. Bd. Health, VII, 529, 1911.
- Howard, U. S. F. B. 459, 5, 1911.
- Howard, Circ. 33, Off. Minn. Ent., 1914.
- Howard, Minn. R. 15, 57, 1914.
- Hutchinson, Prog. Farm., July 2, '08, 3.
- Hutchison, U. S. D. A. 14, 1, 1914.
- Jackson, Publ. Health Mich., IV, 109, 1909.
- Johannsen, Me. B. 177, 38, 1910.
- Johannsen, Me. B. 187, 6, 1911.
- Jones, Maritime Med. News, XVIII, 285, 1906.
- Kirkland, Me. Dept. Agr. Quar. B., Vol. IV, 1, 11, 1905.
- Levy, Amer. Jr. Publ. Health, IV, 439, 1914.
- Lipp, Ind. Farm., July 4, 1914, 16.
- Lochhead, Syn. Ec. Ent. 92, 1914.
- Mason, O. Farm., Mar. 14, 1914, p. 384.
- Mays, N. Y. Med. Jr., Aug. 26, '05, 437.
- Miller, Amer. Jr. Publ. Health, IV, 512, 1914.
- Milliken, J. Ec. Ent. IV, 275, 1911.
- Mitzmain, Bull. 94, Publ. Health Hyg. Lab., 36, 1914.
- Morrill, S. W. Stockm., Aug. 29, '13, 10.
- Morrill, S. W. Stockm., Nov. 21, '13, 10.
- Mumma, Farm. Guide, Aug. 22, '14, 17.
- Nystrom, The Ranch, Sept. 1, 1912, 8.
- O'Kane, Inj. Ins. 349, 1914.
- Orton, Bost. Med. Surg. Jr., Feb. 8, 1912, 211.
- Osmond, Lancet Clinic, LXII, 394, 1909.
- Overton, L. I. Med. Jr., IV, 480, 1910.
- Paine, Psyche, 1912, 156.

Musca domestica (*Cont'd*)

- Palmer, Atlanta Jr. Rec. Med., XIV, 244, 1910.
- Parker, Mont. Bd. Ent. Bien. R. 1, 35, 1914.
- Parrott, Kans. P. B. 42.
- Parrott, Deseret Farm., July 27, '05, 2.
- Porter, Fla. Health Notes V, 98, 1910.
- Purdue, Ind. Farm., June 20, 1914, 16.
- Rankin, Bull. N. Car. Bd. Health, XXVI, 31, 1911.
- Rice, Ind. Farm., Oct. 24, 1908, 15.
- Riley, Rur. N. Y., 1909, 621.
- Rosenau, Prevent. Med., 224, 1913.
- Ross, Reduct. Dom. Flies, Phila., 1913.
- Ross, Sci. Amer. Suppl., LXXVII, 322, 1914.
- Ross, West Can. Med. Jr., VIII, 293, '14.
- Russell, Wis. B. 240, 44, 1914.
- Sackett, Farm. Guide, Mar. 4, '11, 13.
- Severin, S. D. Hort. Soc. 7th R., 171, 1910.
- Skinner, N. Orl. Med. Surg. Jr., LXI, 950, 1909.
- Smith, N. J. B. 203, 27, 1907.
- Smith, Amer. Jr. Publ. Health XVIII, 312, 1908.
- Smith, N. C. P. B. 23, 78, 1911.
- Smith, N. C. R. 34, 62, 1911.
- Spratt, Publ. Health Mich. I, 22, 1906.
- Stevens, Prog. Farm., Apr. 30, 1910, 390.
- Stiles & Lumsden, U. S. F. B. 463, 9, '11.
- Surface, Pa. D. A. Zoöl. III, 2, 60, 1905.
- Surface, Pa. D. A. Zoöl. III, 4, 109, '05.
- Lincecum, Tex. State Jr. Med., V, 186, 1909.
- Surface, Pa. D. A. Zoöl. VII, 2, 60, '09.
- Surface, Pa. D. A. Zoöl. III, 1, 22, 1913.
- Swenk, Nebr. Bd. Agr. R. f. 1909, 258.
- Swenk, Nebr. Hort. Soc., 1909, 125.
- Symons, Md. B. 134, 210, 1909.
- Terry, Amer. Jr. Publ. Health, II, 14, 1912.
- Terry, South. Med. Jr., 1913, 355.
- Titus, Deseret Farm., Aug. 15, 1908, 12.
- Titus, Deseret Farm., Aug. 22, 1908, 12.
- Titus, Utah Farm., July 12, 1913, 810.
- Torrey, Jr. Infect. Dis., Mar. '12, 166.
- Tucker, Farm & Ranch, Apr. 20, '12, 6.
- Tuckerman, Nebr. Farm., Aug. 19, 1914, 796.
- Walls, Milit. Surg., XXXII, 568, 1913.
- Washburn, Minn. R. 10, 145, 1905.
- Washburn, Minn. Ent. R. 13, 76, 135, 1910.
- Washburn, Minn. R. 14, 62, 1912.
- Washburn, Minn. Hort. Soc., 1912, 214.
- Washburn, Wis. Hort. Soc. R. f. '12, 125.
- Whitmarsh, Ohio B. 253, 103, 1912.
- Wilson, Western Med. Rev., XVII, 244, ——— 1912.
- Zetek, Ann. Ent. Soc. Am. VII, 70, f. 14.
- C. Gentl., 1910, 573.
- Housefly at the Bar, Merchants' Assoc. N. Y., 1909.
- Amer. Med. Assoc. XLVI, 1962, 1906.
- Nebr. Bd. Agr. R. f. 1909, 258.
- N. C. Bd. Health, B., XXV, 4, 1910.
- N. C. Bd. Health B., 28, 2, 37, 1913.
- Nor'-West Farm., June 21, 1909, 712.
- Tenn. Agric., Vol. 1, No. 3, 133, 1912.

Musca domestica and consumption

Cobb, Amer. Med., Mar. 25, 1905, 475.

Musca domestica and diarrhoea

Armstrong, Jr. Amer. Med. Assoc. LXII, 200, 1914.

Musca domestica and disease

Stiles & Keister, Pub. Health R. XXVIII, 2530, 1913.

Summers, Iowa Agric., June. 1913, 582.

Musca domestica and food

Abel, U. S. F. B. 275, 15, 1909.

Musca domestica and leprosy

Howard & Clark, Jr. Exper. Med., Dec. 1912, 850.

Howard & Clark, Jr. Med. Research, May 1914, 127.

Musca domestica and plague

Wayson, Pub. Health R. XXIX, 3390, 1914.

Musca domestica and poliomyelitis

Flexner, Jr. Amer. Med. Assoc. LVI, 1717, 1911.

Musca domestica and typhoid

Demaree, Ind. Farm., July 27, 1907, 13.

McCrae, Osler's Mod. Med., II, 87, '07.

Terry, Pub. Health R. XXVIII, 68, '13.

Musca domestica, baits and poisons

Morrill, J. Ec. Ent. VII, 268, 1914.

- Musca domestica**, *flying power*
Hodge, Science, Oct. 10, 1913, 512.
- Musca domestica**, *Formalin poisoning for*
Smith, J. Ec. Ent. IV, 417, 1911.
- Musca domestica**, *hibernation*
Skinner, Ent. News, 1913, 303.
- Musca domestica**, *larvae penetrate sand*
Stiles, Pub. Health Repts. XXVI, 1277, 1911.
- Musca domestica**, *parasites*
Girault & Sanders, Psyche, 1910, 9, 108, 145.
Ransom, U. S. B. An. I. B. 163, 1913.
- Musca domestica**, *Minnesota trap for*
Washburn, Minn. C. 26, 1913.
- Musca domestica** *trap for maggots*
Levy & Tuck, Amer. Jr. Pub. Health, IX, 657, 1913.
McKay, Fla. (Jacksonville) Bd. Health R., 1913, 47.
- Muscina stabulans**
Felt, N. Y. R. 26, 67, 1911.
Gibson, Ont. Ent. Soc. R. 41, 13, 1911.
Herrick, Household Ins. 46, 1914.
Howard, U. S. C. 71, 2, 1906.
Howard, U. S. F. B. 459, 6, 1911.
Walton, J. Ec. Ent. I, 329, 1908.
- Mycetobia divergens**
Johannsen, Me. B. 177, 31, 1910.
- Mycetophagus flexuosus**
Felt, N. Y. St. Mus. Mem. 8, 495, 1906.
- Mycetophagus punctatus**
Felt, N. Y. St. Mus. Mem. 8, 495, 1906.
- Myelophilus piniperda**
Headlee, N. J. Bd. Agr. R. 41, 236.
- Myiasis**
Banks, Tech. B. 22, U. S. Bur. Ent., '12.
Cairns, Post Graduate (N. Y.), XXI, 1004, 1906.
Campbell & Cooper, Jr. Amer. Med. Assoc., LIII, 1160, 1909.
Deaderich, N. Orl. Med. Surg. Jr., LXI, 247, 1908.
Fletcher, Amer. Jr. Cline. Med., XVII, 1353, 1910.
Gilbert, Archiv. Intern. Med., II, 226, '08.
Hall & Muir, Archiv. Intern. Med., Feb. 1913, 193.
Hart, Bost. Med. Surg. Jr., CLXVI, 170, 1912.
Ives, Weekly Bull. St. Louis Med. Soc., VII, 595, 1914.
- McCulloch, Milit. Surg., XXXV, 251, 1914.
- Mitchell, Denver Med. Times, XXIV, 648, 1905.
- Nicholson, Jr. Amer. Med. Assoc., LIV, 1687, 1910.
- Schenck, Jr. Kans. Med. Soc., V, 11, '05.
- Stiles, Osler's Mod. Med., I, 637, 1907.
- Strauch, Jr. Cutan. Dis., XXII, 522, '06.
- Strine, U. S. Naval Med. Bull. V, 51, '11.
- Swan, Pr. Path. Soc. Phila., XIII, 32, 1910.
- Wohl, Pr. Path. Soc. Phila., XVI, 39, 1914.
- Myiophasia aenea**
Ainslie, U. S. B. 85, 140, 1910.
Brooks, W. Va. B. 119, 329, 1909.
Brooks, W. Va. R. f. 1909-1910, 190.
Brooks, W. Va. B. 128, 182, 1910.
Hunter & Pierce, U. S. B. 114, 142, 1912.
Pierce, U. S. B. 73, 30, 1908.
Pierce, U. S. B. 73, 40, 1908.
Pierce, U. S. B. 100, 48, 1912.
Quaintance & Jenne, U. S. B. 103, 149, 1912.
Rumsey, W. Va. R. f. 1909-1910, 68.
- Myochrous denticollis**
Forbes, Ill. Ent. R. 23, 103, 1905.
Titus, U. S. B. 54, 88, 1905.
Tucker, Kans. Farm., Nov. 2, '05, 1112.
Tucker, Can. Ent., 1911, 27.
——— U. S. Y. B., 1905, 633.
- Myochrous squamosus**
Taylor, Colo. B. 119, 15, 1906.
Taylor, Colo. R. 19, 149, 1906.
- Myonyssus decumani**
Banks, Publ. Health Mar. Hosp. Serv. B. 30, 83, 1910.
- Myrmica levinodis**
Wheeler, J. Ec. Ent. I, 337, 1908.
- Myrmica lobicornis**
Forbes, Ill. Ent. R. 23, 158, 1905.
Hammar, U. S. B. 80, 110, 1910.
Swenk, Nebr. Bd. Agr. R. f. 1909, 246.
- Myrmica scabrinodis**
Vickery, U. S. B. 85, 106, 1910.
- Mytilaspis citricola**, *see* **Lepidosaphes beckii**
- Mytilaspis pomorum**, *see* **Lepidosaphes ulmi**
- Myzine sexcincta**
Flint & Sanders, J. Ec. Ent. V, 490, '12.

- Myzocallis arundicolens**
Essig, Cal. Hort. B. II, 1-2, 83, 1913.
- Myzocallis bella**
Gillette, J. Ec. Ent. III, 368, 1910.
- Myzocallis caryaefoliae**
Gillette, J. Ec. Ent. III, 369, 1910.
- Myzocallis punctata**
Washburn, Minn. Ent. R. 13, 97, 1910.
- Myzocallis quercus**
Davidson, J. Ec. Ent. III, 376, 1910.
- Myzocallis trifolii**
Davis, Ann. Ent. Soc. Am. I, 256, 1908.
Davis, Tech. B. 25, pt. 2, U. S. Bur. Ent., 1914.
Folsom, Ill. B. 134, 175, 1909.
Folsom, Ill. Ent. R. 25, 103, 1909.
Gillette, J. Ec. Ent. III, 369, 1910.
——— U. S. Y. B., 1908, 569.
- Myzocallis ulmifolii**
Felt, N. Y. St. Mus. Mem. 8, 176, 1905.
Felt, J. Ec. Ent. II, 306, 1909.
Felt, N. Y. R. 25, 79, 1910.
Gillette, J. Ec. Ent. III, 369, 1910.
Henderson, Idaho, R. f. 1905, 21.
Sanderson, N. H. R. 17-18, 347, 1906.
- Myzocallis walshii**
Gillette, J. Ec. Ent. III, 368, 1910.
- Myzus achyrantes**
Forbes, Ill. Ent. R. 23, 209, 1905.
- Myzus cerasi**
Bethune, Ont. Agr. Coll. B. 158, 22, '07.
Caesar, Ont. Ent. Soc. R. 43, 78, 1913.
Cockle, Pr. Ent. Soc. B. C., 1, 13, 1911.
Cooley, Mont. B. 88, 90, 1912.
Cooley, Mont. B. 92, 57, 1912.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 86, 1913.
Essig, Cal. Hort. B. II, 1-2, 76, 1913.
Felt, J. Ec. Ent. II, 306, 1909.
Felt, N. Y. R. 25, 77, 1910.
Gillette, U. S. B. 52, 58, 1905.
Gillette, J. Ec. Ent. I, 362, 1908.
Gillette & Taylor, Colo. B. 133, 42, 1908.
Gillette & Taylor, Colo. B. 134, 14, '08.
Gillette & Taylor, Better Fr., Apr. '09, 19.
Gillette & Taylor, Colo. Fr. Grow., Apr. 1909, 14.
Gossard, Ohio B. 198, 66, 1908.
Gossard, Ohio B. 233, 131, 1911.
Haseman, Mo. Hort. Soc., 1911, 261.
O'Kane, Inj. Ins. 318, 1914.
Sanderson, Ins. Pests, 666, 1912.
- Slingerland & Crosby, Man. Fr. Ins. 310, 1914.
- Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 13.
- Smith, Nebr. Bd. Agr. R. f. 1908, 320.
- Swenk, Nebr. Hort. Soc., 1909, 84.
- Treherne, Pr. Ent. Soc. B. C., 4, 24, '14.
- Wells, Mich. Farm., Dec. 28, 1912, 599.
- Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 92.
- Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 200.
- C. Gentl., 1905, 606.
- C. Gentl., 1906, 775.
- C. Gentl., 1907, 638.
- Rur. N. Y., 1912, 430.
- Myzus mahaleb**
Slingerland & Crosby, Man. Fr. Ins., 257, 1914.
- Myzus persicae**
Barre & Conradi, S. C. B. 141, 42, 1909.
Chittenden, Va. Truck Exp. Sta. B. 2, 30, 1909.
Davis, Ill. Ent. R. 26, 146, 1911.
Davis, Ill. Ent. R. 27, 117, 1912.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 79, 1913.
Douglass, Ind. Ent. R. 1, 103, 1908.
Essig, Pom. Jr. Ent. III, 598, 1911.
Essig, Cal. Hort. B. I, 4, 128, 1912.
Essig, Cal. Hort. B. II, 1-2, 77, 1913.
Gillette, J. Ec. Ent. I, 359, 1908.
Gillette & Taylor, Colo. B. 133, 32, '08.
Gillette & Taylor, Colo. B. 134, 12, '08.
Gillette & Taylor, Better Fr., Apr. 1909, 18.
Gillette & Taylor, Colo. Fr. Grow., Apr. 1909, 13.
Gillette & Weldon, Colo. B. 169, 13, '10.
Headlee, Kans. Hort. Soc., 1908, 50.
Morris, Ont. Ent. Soc. R. 44, 23, 1914.
Morrison, Ind. Ent. R. 5, 230, 1912.
Murtfeldt, J. Ec. Ent. II, 219, 1909.
O'Kane, Inj. Ins. 198, 320, 1914.
Patch, Me. B. 202, 174, 1913.
Sanborn, Okla. B. 100, 16, 50, 1912.
Sanderson, Ins. Pests, 375, 658, 1912.
Slingerland & Crosby, Man. Fr. Ins. 291, 1914.
Smith, Nebr. Bd. Agr. R. f. 1908, 321.
Smith, N. J. B. 235, 35, 1911.
Swenk, Nebr. Hort. Soc., 1909, 84.

- Taylor, J. Ec. Ent. I, 83, 1908.
 Watson, Fla. B. 125, 1914, 72.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 93.
 ——— U. S. Y. B., 1907, 547.
 ——— U. S. Y. B., 1908, 572.
- Myzus pruni**
 Smyth, Kans. Hort. Soc., 1910, 66.
- Myzus ribis**
 Caesar, Ont. Ent. Soc. R. 43, 78, 1913.
 Caesar, Ont. Dept. Agr. Fr. B., 222, 35, 1914.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 107, 1913.
 Gibson, Ont. Ent. Soc. R. 40, 12, 1910.
 Lochhead, Ont. Ent. Soc. R. 35, 30, '05.
 Lochhead, Ont. Ent. Soc. R. 40, 73, '10.
 Moore, Wis. B. 190, 29, 1910.
 O'Kane, Inj. Ins. 319, 1914.
 Ruggles & Stakman, Minn. B. 121, 22, 1911.
 Sanderson, Ins. Pests, 484, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 350, 1914.
 Surface, Pa. D. A. Zoöl. III, 1, 11, 1913.
 Treherne, Ont. Ent. Soc. R. 41, 20, 1911.
 Wilson, Oreg. Bien. Crop Pest. R. f. 1911-1912, 94.
- Myzus rosarum**
 Davis, Ill. Ent. R. 27, 117, 1912.
 Essig, Cal. Hort. B. II, 1-2, 79, 1913.
- Myzus spp.**
 Gillette, J. Ec. Ent. IV, 381, 1911.
- Myzus vincae**
 Davis, Ill. Ent. R. 27, 117, 1912.
- Nabis ferus**
 Bruner & Swenk, Nebr. B. 96, 17, 1907.
- Nabis rufusculus**
 Felt, N. Y. St. Mus. Mem. 8, 688, 1906.
- Nadata gibbosa**
 Felt, N. Y. St. Mus. Mem. 8, 521, 1906.
- Naphthalene-and fleas**
 Girault, Ent. News, 1914, 130.
- Naphthol-sulphur**
 Smith, N. J. R., 1905, 614.
- Napomyza chrysanthemi**, *see* **Phytomyza**
- Narcissus bulb-fly**, *see* **Merodon equestris**
- Narnia pallidicornis**
 Hunter, Pratt & Mitchell, U. S. B. 113, 32, 1912.
 ——— U. S. Y. B., 1908, 568.
- Native currant stem-borer**, *see* **Psenocerus supernotatus**
- Native currant worm**, *see* **Pristiphora grossulariae**
- Native peach bark-beetle**, *see* **Phloeophthorus liminaris**
- Necrobia rufipes**
 Herrick, Household Ins. 277, 1914.
 ——— U. S. Y. B., 1907, 552.
- Nectarophora avenae**, *see* **Macrosiphum granaria**
- Nectarophora chrysanthemicolens**, *see* **Macrosiphum sanborni**
- Nectarophora cucurbitae**, *see* **Macrosiphum**
- Nectarophora destructor**, *see* **Macrosiphum pisi**
- Nectarophora granaria**, *see* **Macrosiphum**
- Nectarophora rosae**, *see* **Macrosiphum**
- Nectarophora rudbeckiae**, *see* **Macrosiphum**
- Nectarophora solanifolii**, *see* **Macrosiphum**
- Negro bug**, *see* **Corimelaena pulicaria**
- Nematus erichsonii**
 Bailey, Vt. Agr. R. 6, 44, 1914.
 Bethune, Ont. Ent. Soc. R. 39, 135, '09.
 Felt, N. Y. St. Mus. Mem. 8, 418, 1906.
 Fyles, Ont. Ent. Soc. R. 37, 105, 1907.
 Gibson, Ont. Ent. Soc. R. 40, 13, 1910.
 Gibson, Ont. Ent. Soc. R. 41, 14, 1911.
 Hewitt, Ont. Ent. Soc. R. 40, 20, 1910.
 Hewitt, J. Ec. Ent. III, 319, 1910.
 Hewitt, Can. Exp. Farms Ent. B. 5, 9, '12.
 Hopkins, U. S. B. 58, 60, 1909.
 Hopkins, U. S. C. 125, 1910.
 Hopkins, U. S. Y. B., 1907, 153.
 Hopkins, U. S. Y. B., 1907, 158.
 Jarvis, Can. Hort. XXVIII, 303, 1905.
 Jarvis, Ont. Ent. Soc. R. 37, 55, 1907.
 Johannsen, Me. B. 177, 41, 1910.
 Johannsen & Patch, Me. B. 195, 242, '11.
 Patch, Me. B. 148, 272, 1907.
 Patch, Me. B. 162, 364, 1908.
 Ruggles, Can. Ent., 1910, 93.
 Ruggles, J. Ec. Ent. IV, 171, 1911.
 Swaine, Ont. Ent. Soc. R. 43, 87, 1913.
 Walker, Ont. Ent. Soc. R. 42, 57, 1912.
 Washburn, Minn. Ent. R. 13, 109, 1910.
 Washburn, Minn. B. 14, 62, 1912.
 Zavitz, Ont. Ent. Soc. R. 36, 124, 1906.
 ——— Amer. Lumberman, Sept. 9, 1911, 40.

- U. S. Y. B., 1906, 515.
 ——— U. S. Y. B., 1907, 549.
 ——— U. S. Y. B., 1908, 575.
- Nematus ribesi**, *see* **Pteronus**
- Nematus unicolor**
 Felt, N. Y. St. Mus. Mem. 8, 571, 1906.
- Nematus ventricosus**, *see* **Pteronus ribesi**
- Nemobius fasciatus**
 Forbes, Ill. Ent. R. 23, 214, 1905.
- Nemorea leucaniae**
 Dew, J. Ec. Ent. VI, 365, 1913.
- Neocatolaccus tylodermae**
 Brooks, W. Va. B. 119, 329, 1909.
 Rumsey, W. Va. R. f. 1909–1910, 68.
- Neocerata rhodophaga**
 Davis, J. Ec. Ent. III, 183, 1910.
 Davis, Ill. Ent. R. 27, 106, 1912.
- Neoclytus capraea**
 Felt, N. Y. St. Mus. Mem. 8, 279, 1905.
 Huddleston, S. D. Hort. Soc. 3rd. R. 192, 1906.
 Severin, S. D. Hort. Soc. 9th. R. 119, '12.
 Webb, U. S. Y. B., 1910, 353.
- Neoclytus erythrocephalus**
 Felt, N. Y. St. Mus. Mem. 8, 70, 71, '05.
 Felt, N. Y. R. 27, 88, 1912.
 Webb, U. S. Y. B., 1910, 354.
- Neolecanium cornuparvum**
 Newell & Barber, U. S. B. 122, 65, 1913.
 Sanders, J. Ec. Ent. II, 448, 1909.
- Neomysia pullata**
 Felt, N. Y. St. Mus. Mem. 8, 605, 1906.
- Neophasia menapia**
 Hopkins, U. S. Y. B., 1907, 159.
 ——— U. S. Y. B., 1908, 574.
- Neoprociphilus attenuatus**
 Jackson, Pr. Columbus Hort. Soc., 1907, 214.
 Patch, Me. B. 202, 174, 1913.
- Nephelodes minians**
 Forbes, Ill. Ent. R. 23, 29, 1905.
 Stedman, Mo. Bd. Agr. R. 38, 285, '06.
- Nephoteryx rubrizonella**
 Ehrhorn, Pac. Rur. Press, LXXVI, 372, 1908.
- Nepticula pomivorella**
 Slingerland & Crosby, Man. Fr. Ins. 74, 1914.
- Nepticula slingerlandella**
 Baldwin, Ind. Ent. R. 5, 100, 1912.
 Crosby, N. Y. C. B. 308, 1911.
 Crosby, Can. Ent., 1912, 25.
- Slingerland, N. Y. Fr. Grow. Assoc., 1909, 122.
- Neurocolpus nubilis**
 Bethune, Ont. Agr. Coll. R. 38, 27, 1913.
 Caesar, Ont. Ent. Soc. R. 43, 103, 1913.
 Smith, U. S. B. 67, 105, 1907.
- Neuroterus batatus**
 Felt, N. Y. St. Mus. Mem. 8, 624, 1906.
- Neuroterus saltatorius**
 Felt, N. Y. R. 28, 105, 1913.
 Howard, U. S. B. 54, 81, 1905.
 Washburn, Minn. Ent. R. 13, 131, 1910.
- Neuroterus umbilicatus**
 Felt, N. Y. St. Mus. Mem. 8, 627, 1906.
- Neurotoma inconspicua**
 Slingerland & Crosby, Man. Fr. Ins. 254, 1914.
- New York weevil**, *see* **Ithycerus noveboracensis**
- Nezara hilaris**
 Douglass, Ind. Ent. R. 4, 53, 1912.
 Gossard, Ohio B. 233, 125, 1911.
 Gossard, Ohio Hort. Soc., 1912, 64.
 Gossard, Ohio Hort. Soc., 1913, 48.
 Gossard, Ohio Hort. Soc., 1914, 108.
 Hinds, U. S. B. 59, 29, 1906.
 Morrill, U. S. B. 86, 78, 1910.
 Sample, Fla. Fr. Prod. News, Sept. 30, 1910, 2.
 Sanborn, Okla. B. 100, 42, 1912.
 Sanderson, U. S. F. B. 223, 21, 1905.
 Sanderson, U. S. B. 57, 47, 1906.
 Smith & Lewis, U. S. B. 60, 81, 1906.
 Thorne, Ohio B. 249, xxii, 1912.
 Thorne, Ohio B. 263, xxi, 1913.
 Watson, Fla. B. 112, 38, 1912.
 Whitmarsh, J. Ec. Ent. VII, 336, 1914.
 ——— U. S. Y. B., 1907, 545.
 ——— U. S. Y. B., 1908, 573.
- Nezara pennsylvanica**
 Gossard, Ohio B. 233, 141, 1911.
- Nezara viridula**
 Morrill, U. S. B. 82, 1910.
- Niagara Spray**
 ——— U. S. D. A. Ins. & Fung. No. 93, '13.
- Nicine**
 Fernald, Mass. R. 25, I, 89, 1913.
- Nico-Fume**
 Smith, N. J. R., 1909, 373.
- Nico-Fume Liquid**
 ——— U. S. D. A. Ins. & Fung. No. 33, 1913.

- U. S. D. A. Ins. & Fung. Bd. Ins.
1, p. 20, 1914.
- "Nico-Sul"**
Smith, N. J. R., 1910, 366.
- Nicotine**
Crosby & Leonard, N. Y. C. B. 346, 492,
1914.
- Nicotine extracts**
——— Va. Agr. R. f. 1914, 152.
- Nigelia sorghiella**, *see* Celama
- Nikoteen Aphis Punk**
——— U. S. D. A. Ins. & Fung. Bd., Ins.
3, p. 47, 1914.
- Nine-spotted ladybird**, *see* Coccinella
novemnotata
- Niptus hololeucus**
Schwarz, Pr. Ent. Soc. Wash. VII, 24,
1905.
- Nitrate of soda**
——— Pac. Rur. Press, LXXXV, 172,
1913.
- Noctua clandestina**
Gibson, Can. Exp. Farms Ent. B. 3, 21,
1912.
Forbes, Ill. Ent. R. 23, 31, 1905.
Gregson, U. S. B. 67, 125, 1907.
——— U. S. Y. B., 1907, 545.
- Noctua c-nigrum**
Chittenden, Ins. Inj. Veg. 210, 1907.
Forbes, Ill. Ent. R. 23, 25, 1905.
Gibson, Can. Exp. Farms Ent. B. 3, 21,
1912.
Sanborn, Okla. B. 100, 14, 1912.
Symons, Md. B. 101, 161, 1905.
——— U. S. Y. B., 1907, 545.
- Noctua fennica**
Caesar, Ont. Ent. Soc. R. 42, 32,
1912.
Gibson, Can. Exp. Farms, Ent. B. 3, 28,
1912.
Young, Ont. Ent. Soc. R. 37, 15, 1907.
- Noctua sp.**
Surface, Pa. D. A. Zoöl. III, 12, 367, '06.
- Nodonota puncticollis**
Britton, Conn. R. 8, 845, 1909.
Houghton, Del. R. 16-17-18, 90, 1907.
Skinner, J. Ec. Ent. II, 257, 1909.
——— U. S. Y. B., 1908, 578.
——— U. S. Y. B., 1906, 516.
- Nodonota tristis**
Slingerland & Crosby, Man. Fr. Ins. 255,
1914.
- Nomius pygmaeus**
Howard, U. S. B. 54, 83, 1905.
- Nomotettix compressus**
Morgan, U. S. Y. B., 1910, 292.
- Northern brentthis**, *see* Eupsalis minuta
- Northern grass worm**, *see* Drasteria erech-
tea
- Northern horn worm**, *see* Phlegethontius
quinquemaculata
- Northern mole cricket**, *see* Gryllotalpa
borealis
- Northern leaf-footed plant-bug**, *see*
Leptoglossus oppositus
- Northern tobacco worm**, *see* Phlegethontius
quinquemaculata
- Northwestern tent caterpillar**, *see*
Malacosoma pluvialis
- No-see-ums**, *see* Ceratopogon
- Notanisomorpha ainsliei**
Phillips, J. Agr. Res. II, 28, 1914.
- Notolophus**, *see* Hemerocampa
- Notophallus dorsalis**
——— U. S. Y. B., 1907, 543.
- Notoxus anchora**
Felt, N. Y. St. Mus. Mem. 8, 686, 1906.
- Notoxus bifasciatus**
Felt, N. Y. St. Mus. Mem. 8, 696, 1906.
- Notoxus monodon**
Gill, U. S. B. 116, 102, 1913.
- Novius bellus**
Isaac, Bug vs. Bug, 10, 1906.
- Novius cardinalis**
Burgess & Collins, U. S. Y. B., '11, 461.
Carnes, Cal. Hort. B. I, 5, 197, 1912.
Essig, Cal. Hort. B. II, 1-2, 221, 1913.
Howard & Fiske, U. S. B. 91, 24, 1911.
Isaac, Bug vs. Bug, 9, 1906.
Pease, Cal. Cult, XXX, 571, 1908.
Quayle, Cal. B. 214, 472, 1911.
Quayle, J. Ec. Ent. IV, 512, 1911.
Smith, U. S. B. 52, 75, 1905.
Tucker, La. B. 145, 7, 1914.
- Novius koebeleii**
Essig, Cal. Hort. B. II, 1-2, 222, 1913.
Isaac, Bug vs. Bug, 9, 1906.
- Novius sp.**
Isaac, Bug. vs. Bug, 10, 1906.
- Nursery insects**
Weiss, Ent. News, 1914, 392.
Weiss & Patterson, N. J. C. 15, 1912.
- Nursery tree experiment**
Smith, N. J. R., 1907, 413.

- Nuttall's blister beetle**, *see* *Cantharis nuttalli*
- Nyal's Roach Powder**
 ——— U. S. D. A. Ins. & Fung. Bd.,
 Ins. 6, p. 85, 1914.
- Nyctobates pennsylvanica**
 Felt, N. Y. St. Mus. Mem. 8, 492, 1906.
- Nysius angustatus**
 Bremner, Cal. Hort. Comm. Destr. Ins.
 12, 1910.
 Chittenden, Ins. Inj. Veg., 150, 1915.
 Conradi, Tex. B. 89, 17, 1907.
 Cooley, Mont. R. 12, 271, 1906.
 Cooley, Mont. B. 98, 124, 1912.
 Douglass, Ind. Ent. R. 1, 88, 1908.
 Essig, Cal. Hort. B. II, 1-2, 149, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 685, 1906.
 Forbes, Ill. Ent. R. 23, 117, 1905.
 Morrill, U. S. B. 86, 92, 1910.
 Sanborn, Okla. B. 100, 56, 1912.
 Sanderson, U. S. B. 57, 29, 1906.
 Swenk, Nebr. Bd. Agr. R. f. 1908, 290.
 Swenk, Nebr. Bd. Agr. R. f. 1910, 368.
 Swenk, Nebr. Ent. B. 1, 72, 1913.
 Webster, U. S. B. 69, 31, 1907.
 ——— Pac. Rur. Press, LXXIX, 463,
 1910.
- Nysius minutus**
 Essig, Cal. Hort. B. II, 1-2, 150, 1913.
 Morrill, Ariz. Comm. Agr. & Hort. R. 6,
 30, 1914.
- Nysius sp.**
 Conradi, U. S. B. 60, 69, 1906.
- Nysius strigosus**
 Howard, U. S. R. Ent., 1914, 6.
- Oak ambrosia beetle**, *see* *Xyleborus affinis*
- Oak carpenter worm**, *see* *Prionoxystus robiniae*
- Oak eriococcus**, *see* *Eriococcus quercus*
- Oak insects**
 Fyles, Ont. Ent. Soc. R. 35, 90, 1905.
 Surface, Pa. D. A. Zoöl. II, 6, 244, 1912.
- Oak lecanium**, *see* *Eulecanium quercifex*
- Oak pruner**, *see* *Elaphidion villosus*
- Oak scale**, *see* *Chionaspis quercus*
- Oak tussock caterpillar**, *see* *Halisidota maculata*
- Oak twig-girdler**, *see* *Agrilus politus*
- Oak webworm**, *see* *Archips fervidana*
- Oat aphid**, *see* *Siphocoryne avenae*
- Oat insects**
 Warburton, U. S. F. B. 424, 42, 1910.
- Oberea bimaculata**
 Barre & Conradi, S. C. B. 141, 27, 1909.
 Bethune, Ont. Ent. Soc. R. 39, 133, 1909.
 Caesar, Ont. Ent. Soc. R. 43, 82, 1913.
 Dean & Peairs, Kans. Agr. Educ. VI,
 2, 111, 1913.
 Fulton, Wright & Gregg, Pa. B. 110, 37,
 1911.
 Gossard, Ohio B. 233, 146, 1911.
 Grant, Ont. Ent. Soc. R. 41, 18, 1911.
 Herrick, Rur. N. Y., 1912, 1137.
 Hitchings, Me. Ent. R. 5, 4, 1910.
 Jarvis, Can. Hort. XXXI, 74, 1908.
 Johannsen, Me. B. 207, 463, 1912.
 Lochhead, Syn. Ec. Ent. 78, 1914.
 Nicholson, Okla. B. 69, 15, 1905.
 O'Kane, Inj. Ins. 245, 1914.
 Patch, Me. B. 162, 359, 1908.
 Sanderson, Ins. Pests, 462, 1912.
 Slingerland & Crosby, N. Y. C. B. 252,
 343, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 326,
 1914.
 Slingerland, Herrick & Crosby, N. Y.
 C. B. 283, 475, 1910.
 Sones, Mo. Fr. Exp. Sta. Bien. R.,
 1913-1914, 15.
 Surface, Pa. D. A. Zoöl. III, 1, 9, 1913.
 Swaine, Ont. Ent. Soc. R. 41, 96, 1911.
 Wells, Prai. Farm., LXXVIII, 520, '06.
 Whiteside, Mont. Bd. Hort. f. 1905-
 1906, 47, 1907.
 ——— Pac. Rur. Press, LXXIX, 443,
 1910.
 ——— Pac. Rur. Press, LXXIII, 339,
 1912.
 ——— U. S. Y. B., 1908, 574.
- Oberea ocellata**
 Slingerland & Crosby, Man. Fr. Ins.
 209, 1914.
- Oberea oculata**
 Sones, Mo. Fr. Exp. Sta. Bien. R.,
 1913-1914, 9.
- Oberea schaumii**
 Young, Pr. Columbus Hort. Soc., '06, 68.
- Oberea sp.**
 Swaine, Ont. Ent. Soc. R. 41, 92, 1911.
- Oberea tripunctata**
 Davis, J. Ec. Ent. III, 184, 1910.
 Forbes, Ill. B. 151, 506, 1911.

- Forbes, Ill. Ent. R. 26, 44, 1911.
Swaine, Ont. Ent. Soc. R. 42, 72, 1912.
- Oberea ulmicola**
Forbes, Ill. Ent. R. 24, 118, 1908.
- Oblique-banded leaf-roller**, *see* **Archips rosaceana**
- Obrium rubrum**
Felt, N. Y. St. Mus. Mem. 8, 463, '06.
- Ochlerotatus**, *see* **Culex**
- Ocneria dispar**, *see* **Porthetria**
- Octagon soap**
Berger, Fla. R., 1909, xliv.
- Odell's Roach Powder**
—— U. S. D. A. Ins. & Fung. No. 89, 1914.
- Odontota**, *see* **Chalepus**
- Oebalus pugnax**
Forbes, Ill. Ent. R. 23, 194, 1905.
- Oecanthus angustipennis**
Forbes, Ill. Ent. R. 23, 220, 1905.
Jordan, N. Y. St. B. 393, 652, 1914.
Parrott & Fulton, N. Y. St. B. 388, 447, 1914.
- Oecanthus nigricornis**
Felt, N. Y. St. Mus. Mem. 8, 699, '06.
Forbes, Ill. Ent. R. 23, 221, 1905.
Gossard, Ohio B. 233, 146, 1911.
Houghton, Can. Ent., 1909, 113.
Jordan, N. Y. St. B. 393, 652, 1914.
Lochhead, Syn. Ec. Ent. 36, 1914.
Parrott & Fulton, N. Y. St. B. 388, 453, 1914.
Slingerland & Crosby, Man. Fr. Ins. 325, 1914.
- Oecanthus niveus**
Baldwin, Ind. Ent. R. 5, 84, 1912.
Beach, Iowa B. 127, 59, 1912.
Cotton, Ohio Nurs. Orch. Insp. B. 7, 30, 1906.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 116, 1913.
Douglass, Ind. Ent. R. 1, 106, 1908.
Douglass, Ind. Ent. R. 3, 106, 1910.
Essig, Cal. Hort. B. II, 1-2, 25, 1913.
Felt, N. Y. St. Mus. Mem. 8, 602, 1906.
Felt, N. Y. R. 22, 53, 1907.
Felt, U. S. B. 67, 40, 1907.
Jordan, N. Y. St. B. 393, 651, 1914.
Lochhead, Syn. Ec. Ent. 36, 1914.
Melander, The Ranch, Apr. 15, 1908, 6.
Moore, Minn. C. 29, 1914.
Parrott, J. Ec. Ent., II, 79, 124, 1909.
- Parrott & Fulton, N. Y. St. B. 388, 430, 1914.
- Sanderson, U. S. F. B. 223, 17, 1905.
Sanderson, U. S. B. 57, 37, 1906.
Sanderson, Ins. Pests, 464, 1912.
Slingerland & Crosby, Man. Fr. Ins. 210, 1914.
- Surface, Pa. D. A. Zoöl. I, 4, 164, 1911.
Surface, Pa. D. A. Zoöl. III, 1, 10, 1913.
Swenk, Nebr. Hort. Soc. B. 19, 23, 1908.
Swenk, Nebr. Hort. Soc., 1909, 92.
Treherne, Ont. Ent. Soc. R. 41, 20, '11.
Troop, Farm. Guide, Dec. 9, 1905, 4.
Troop, Farm. Guide, Feb. 17, 1912, 14.
Troop, Ind. Farm., Feb. 17, 1912, 18.
Webster & Phillips, U. S. B. 110, 136, 1912.
- Oecanthus pini**
Felt, N. Y. St. Mus. Mem. 8, 698, 1906.
Forbes, Ill. Ent. R. 23, 222, 1905.
- Oecanthus quadripunctatus**
Felt, N. Y. St. Mus. Mem. 8, 699, 1906.
Forbes, Ill. Ent. R. 23, 220, 1905.
Gossard, Ohio B. 233, 146, 1911.
Jensen, Ent. News, 1909, 25.
—— U. S. Y. B., 1907, 542.
—— U. S. Y. B., 1908, 568.
- Oecanthus sp.**
Felt, N. Y. R. 25, 93, 1910.
Felt, C. Gentl., 1910, 182.
Gillette, Colo. B. 114, 22, 1906.
Gillette, Better Fr., Feb. 1910, 22.
Gossard, Ohio B. 164, 24, 1905.
Gossard, Ohio B. 233, 109, 118, 1911.
O'Kane, Inj. Ins. 252, 1914.
Parrott, J. Ec. Ent. IV, 216, 1911.
Parrott & Fulton, J. Ec. Ent. VI, 177, 1913.
- Oecanthus sp. on tobacco**
Metcalf, N. C. Dept. Agr. Sp. B. 64, '09.
- Oecodoma fervens**
Sanderson, U. S. F. B. 223, 16, 1905.
- Oedaleonotus enigma**
Hunter, Cal. B. 170, 7, 1905.
- Oedemasia concinna**, *see* **Schizura**
- Oedemasia eximia**
Douglass, Ind. Ent. R. 3, 114, 1910.
- Oestrus oviv**
Bishopp, U. S. Y. B., 1912, 389.
Felt, N. Y. Farm., 7 Dec. 1905, 4.
Hall, U. S. B. An. I. R., 1910, 453.
Herms, Cal. Cult., XLI, 290, 1913.

- Oestrus ovis** (*Cont'd*)
 Kleinheinz, Farm. Guide, July 11, 1914, 18.
 Lochhead, Syn. Ec. Ent. 89, 1914.
 O'Kane, Inj. Ins. 372, 1914.
 Peters, Nebr. Bd. Agr. R. f. 1905, 375.
 Powers, S. C. Dept. Agr. R. 5, 123, '09.
 Ransom, U. S. Y. B., 1905, 141.
 Scott, Nat'l Stockm. & Farm., May 4, 1911, 8.
 Surface, Pa. D. A. Zoöl. III, 1, 15, 1913.
 Swenk, Nebr. Bd. Agr. R. f. 1908, 339.
 Van Alstyne, Rur. N. Y., 1906, 502.
 Washburn, Minn. P. B. 22, 8, 1905.
 Washburn, Minn. R. 10, 130, 1905.
 ——— C. Gentl., 1908, 820.
- Oestrus sp.**
 Ransom, South. Plant., Sept. 1910, 920.
- Ogdoconta cinereola**
 Chittenden, Ins. Inj. Veg. 113, 1907.
 Patch, Me. B. 162, 358, 1908.
- Oil of citronella**
 Morris & Parker, Mont. C. 36, 254, '14.
- Oil and water, Nozzle for mixing**
 Sanderson, U. S. B. 67, 112, 1907.
- Oil-emulsion**
 Parrott, N. Y. St. C. 9, 8, 1908.
 Penny, Del. C. 1, 1907.
 Melander, Wash. Pop. B. 64, 1914.
 Taylor, Mo. Fr. Exp. Sta. C. 4, 1908.
- Oil on citrus**
 Yothers, J. Ec. Ent. VI, 161, 1913.
- Oil vs. lime-sulphur**
 Jarvis, Conn. Storrs B. 54, 172, 1908.
- Oil sprays**
 Brown, Wash. Hort. Assoc. 9th R., '37, '13.
 Jones, Better Fr., Jan. 1914, 33.
 ——— Rur. N. Y., 1912, 90.
- Oils, miscible**
 Britton & Walden, Conn. R. 8, 837, '09.
 Houghton, Del. B. 79, 1907.
 Morris & Parker, Mont. C. 36, 250, '14.
 Parrott, N. Y. Fr. Grow. Assoc., '08, 148.
 Parrott, Hodgkiss & Serrine, N. Y. St. B. 281, 1906.
 Penny, Pa. B. 86, 3, 1908.
 Rees, Mass. Hort. Soc. f. 1914, I, 87.
 Smith, N. J. R., 1907, 455.
 Smith, N. J. B. 213, 21, 1908.
- Oils, see also Soluble oils**
- Oils on dormant trees**
 Felt, N. Y. R. 28, 83, 1913.
- Oleander aphid, see Aphis nerii**
- Oleander scale, see Aspidiotus hederae**
- Olene achatina**
 Felt, N. Y. St. Mus. Mem. 8, 524, 1906.
- Olethreutes albeolana**
 Johannsen, Me. B. 207, 454, 1912.
- Olethreutes bipartitana**
 Pettit, Mich. B. 233, 178, 1906.
- Olethreutes cyanana**
 Felt, N. Y. St. Mus. Mem. 8, 577, 1906.
- Olethreutes hemidesma**
 Davis, J. Ec. Ent. III, 185, 1910.
 Gibson, Ont. Ent. Soc. R. 36, 119, 1906.
- Olethreutes nimbatana**
 Felt, N. Y. St. Mus. Mem. 8, 576, 1906.
- Olethreutes sp. on apple**
 Treherne, Pr. Ent. Soc. B. C., 4, 21, '14.
- Oliarus quinque-lineatus**
 Felt, N. Y. St. Mus. Mem. 8, 686, 1906.
- Oligota oviformis**
 Ewing, Oreg. B. 121, 59, 1914.
 Quayle, Cal. B. 234, 509, 1912.
 Quayle, J. Ec. Ent. VI, 86, 1913.
- Oligotrophus betulæ**
 Felt, N. Y. St. Mus. Mem. 8, 647, 1906.
- Olla abdominalis**
 Davidson, U. S. D. A. B. 100, 38, 1914.
 Essig, Cal. Hort. B. II, 1-2, 208, 1913.
 Ewing, Oreg. B. 121, 64, 1914.
 Palmer, Ann. Ent. Soc. Am. VII, 232, 1914.
 Quayle, Cal. B. 234, 519, 1912.
- Olla oculata**
 Essig, Cal. Hort. B. II, 1-2, 209, 1913.
- Olla plagiata**
 Essig, Cal. Hort. B. II, 1-2, 210, 1913.
- Omileus epicaeroides**
 Sanderson, Ent. News, 1906, 210.
- Omnivorous looper, see Sabulodes caberata**
- Omophron labiatum**
 Forbes, Ill. Ent. R. 23, 178, 1905.
- Omorgus frumentarius**
 Chittenden, U. S. B. 104, 30, 1911.
 Newell & Smith, U. S. B. 52, 72, 1905.
 Popenoe, U. S. C. 142, 3, 1911.
- Omorgus nolæ**
 Johnson & Hammar, U. S. B. 116, 48, 1912.
- Omorgus sp. on Meliana**
 Webster, J. Ec. Ent. V, 336, 1912.
- Omphalocera dentosa**
 Britton, Conn. R. 11, 292, 1912.

- Britton, Conn. R. 13, 253, 1914.
 Quayle, J. Ec. Ent. IV, 521, 1911.
- Omphisa anastomosalis**
 Maskew, Cal. Hort. B. I, 7, 249, 1912.
- Oncideres cingulatus**
 Adams, Ark. B. 92, 8, 1907.
 Bethune, Can. Hort. XXXIV, 182, '11.
 Chittenden, Nut Grow., Dec. 1906, 5.
 Conradi, Farm & Ranch, Mar. 18, 1905, 10.
 Conradi, Tex. Stockm. Farm., Mar. 1, 1905, 2.
 Conradi, U. S. B. 52, 66, 1905.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 63, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 271, 1905.
 Garman, J. Ec. Ent. V, 467, 1912.
 Gossard, Fla. B. 79, 305, 1905.
 Gossard, Ohio Farm., Nov. 11, '05, 385.
 O'Kane, Inj. Ins. 250, 1914.
 Sanborn, Farm & Ranch, Jan. 18, '08, 11.
 Sanborn, Okla. P. B. 163, 1909.
 Sanborn, Okla. B. 91, 5, 1911.
 Sanderson, U. S. B. 57, 39, 1906.
 Slingerland & Crosby, Man. Fr. Ins., 202, 1914.
 Surface, Pa. Dept. Agr. R. 13, 503, '07.
 Symons, Md. B. 101, 148, 1905.
 Webb, U. S. Y. B., 1910, 356.
 ——— U. S. Y. B., 1907, 549.
 ——— U. S. Y. B., 1908, 579.
- Oncideres spp.**
 Chittenden, Nut Grow., Mar. '06, 137.
- Oncideres texana**
 Barre & Conradi, S. C. B. 141, 44, 1909.
 Gossard, Fla. B. 79, 305, 1905.
 Sanborn, Okla. B. 91, 5, 1911.
 Stuckey, Pr. Ga. Hort. Soc. f. 1912, 7.
 Stuckey, South. Cult., July 15, '12, 25.
 Stuckey, South. Cult., Nov. 1, '14, 26.
 Williams, Ala. Poly. B. 155, 47, 563, 1911.
 Worsham, Ga. Bd. Ent. B. 33, 120, '10.
 Worsham, Ga. Hort. Soc., 1910, 120.
- Oncognathus binotatus**
 Roudebush, Natl. Stockm. & Farm., Sept. 28, 1905, 7.
- Oncometopia lateralis**
 Hooker, U. S. B. 67, 111, 1907.
 Sanderson, U. S. F. B. 223, 19, 1905.
 Sanderson, U. S. B. 57, 54, 1906.
 Sanderson, Ins. Pests, 250, 1912.
- Oncometopia undata**
 Forbes, Ill. Ent. R. 23, 204, 1905.
 Sanderson, U. S. F. B. 223, 19, 1905.
 Sanderson, U. S. B. 57, 56, 1906.
 Sanderson, Ins. Pests, 250, 1912.
 Smith & Lewis, U. S. B. 60, 1906.
- Oncopeltus fasciatus**
 Morrill, U. S. B. 86, 93, 1910.
- Onion insects**
 Beattie, U. S. F. B. 354, 35, 1909.
 Chittenden, U. S. Y. B., 1912, 319.
 Surface, Pa. D. A. Zoöl. I, 1, 45, 1911.
 Surface, Pa. D. A. Zoöl. II, 5, 198, '12.
- Onion maggot, see Phorbia cepetorum**
- Onion Thrips, see Thrips tabaci**
- Onthophagus hecate**
 Forbes, Ill. Ent. R. 23, 183, 1905.
- Ooctonus homalodiscæ**
 Sanderson, U. S. B. 57, 51, 1906.
- Ooencyrtus anasæ**
 Chittenden, U. S. C. 39, 2nd Ed., 4, '08.
- Ooencyrtus johnsoni**
 Quaintance, U. S. C. 103, 6, 1908.
- Ooencyrtus sp.**
 Russell, Pr. Ent. Soc. Wash. XV, 93, 1913.
- Opatrinus notus**
 Hooker, U. S. B. 67, 110, 1907.
 Hunter & Pierce, U. S. B. 114, 138, '12.
- Ophion bifoveolatum**
 Forbes, Ill. Ent. R. 24, 161, 1908.
 Forbes, Ill. B. 116, 473, 1907.
- Ophion bilineatum**
 Hitchings, Me. Ent. R. 3, 12, 1908.
 Sanderson, U. S. B. 57, 44, 1906.
- Opius agromyzae**
 Webster & Parks, J. Agr. Res. I, 82, '13.
- Opius anthomyiaæ**
 Smith, N. J. R., 1911, 450.
- Opius aridus**
 Webster & Parks, J. Agr. Res. I, 82, '13.
- Opius brunneipes**
 Webster & Parks, J. Agr. Res. I, 82, '13.
- Opius diastatae**
 Phillips, J. Agr. Res. II, 29, 1914.
- Opius sp.**
 Johannsen & Patch, Me. B. 195, 243, '11.
- Opius succineus**
 Phillips, J. Agr. Res. II, 29, 1914.
- Opius suturalis**
 Webster & Parks, J. Agr. Res. I, 82, '13.
- Opius utahensis**
 Phillips, J. Agr. Res. II, 29, 1914.

- Opostega nonstrigella*
Grossenbacher, N. Y. St. Tech. B. 15, 50, 1910.
- Oppia pilosa*
Marlatt, U. S. B. 71, 136, 1907.
- Opsicoetus personatus*, *see* *Reduvius*
- Orange aphid, *see* *Aphis gossypii*
- Orange-banded clerid, *see* *Clerus ichneumoneus*
- Orange chionaspis, *see* *Chionaspis citri*
- Orange dog, *see* *Papilio thoas*
- Orange fruit mite, *see* *Tenuipalpus californicus*
- Orange insects
Beemis, Cal. Cult., XXXII, 211, 1909.
- Orange leaf-roller, *see* *Platynota rostrana*
- Orange maggot, *see* *Anastrepha ludens*
- Orange mealy bug, *see* *Pseudococcus citri*
- Orange-peel miner, *see* *Marmara* sp.
- Orange sawyer, *see* *Elaphidion inermis*
- Orange-striped oak worm, *see* *Anisota senatoria*
- Orange sulphur, *see* *Eurymus eurytheme*
- Orange thrips, *see* *Euthrips citri*
- Orange tortrix, *see* *Tortrix citrana*
- Orange white spot, *see* *Tetranychus californica*
- Orchard Brand Arsenite Zinc
—— U. S. D. A. Ins. & Fung. No. 125, 1914.
- Orchard Brand Atomic Sulphur Combined with Arsenate of Lead
—— U. S. D. A. Ins. & Fung. No. 104, 1914.
- Orchard Brand Atomic Sulphur Fungicide
—— U. S. D. A. Ins. & Fung. No. 102, 1914.
- Orchard insects
Baldwin, Ind. Farm., Mar. 2, 1912, 1.
Ball, J. Ec. Ent. IV, 184, 1911.
Britton, Conn. Farm., Mar. 4, 1905, 9.
Britton, Conn. Farm., Dec. 4, 1909, 5.
Britton, Conn. Farm., June 11, 1910, 1.
Chenoweth, Mass. Hort. Soc. f. 1914, I, 79.
Conradi & Thomas, S. C. B., 143, 3, '09.
Crandall, Ill. Hort. Soc. f. 1911, 337, '12.
Felt, Mass. Fr. Grow. Assoc. R. 12-16, 84, 1910.
Felt, N. Y. Dept. Agr. B. 42, 102, 1912.
Felt, N. Y. Farm., July 10, 1913, 5.
Gillette, Better Fr., Feb. 1910, 15.
Green, Ind. Hort. Soc. f. 1905, 164, '06.
Lawrence, Oreg. Hort. Soc., 27th Meet., 37.
Parrott, Pr. West. N. Y. Hort. Soc., 59 Meet., 110, 1914.
Quaintance, U. S. Y. B., 1908, 267.
Smith, N. J. R., 1907, 391.
Smith, Pr. Columbus Hort. Soc., 1907, 119.
Stene, Pr. Farmers' Inst. R. I., '11, 102.
Surface, Pa. D. A. Zoöl. VI, 2, 36, 1908.
Volek, Better Fr., Jan. 1913, 18.
Volek, Cal. Cult., XLI, 598, 1913.
Weed, Nat'l Stockm. & Farm., July 19, 1913, 10.
Worsham, Pr. Ga. Hort. Soc. f. 1913, 32.
—— Rur. N. Y., 1905, 549.
- Orchard insects, *see also* Fruit insects
- Orchelimum spp. in corn
Forbes, Ill. Ent. R. 23, 144, 1905.
- Orchelimum vulgare
Smith, N. J. R., 1908, 341.
- Orchestes canus
Gossard, Ohio Hort. Soc., 1914, 106.
Hart, Ill. Ent. R. 26, 83, 1911.
- Orchestes pallicornis
Forbes, Ill. Hort. Soc. f. 1912, 53, 1913.
Forbes, Or. Judd Farm., Jan. 11, '13, 38.
Glenn, Ill. Hort. Soc. f. 1913, 66.
- Orchestes rufipes
Gibson, Ont. Ent. Soc. R. 41, 15, 1911.
- Orcus australasiae
Isaac, Bug vs. Bug, 11, 1906.
- Orcus chalybeus
Essig, Cal. Hort. B. II, 1-2, 211, 1913.
Isaac, Bug vs. Bug, 11, 1906.
Quayle, Cal. B. 214, 459, 1911.
Quayle, Cal. B. 222, 141, 1911.
Quayle, Cal. B. 223, 193, 1911.
Yates, Cal. Hort. Comm. C. Nov. 1905, 11.
- Oregon wash
Forbes, Ill. Hort. Soc. f. 1904, 20, 1905.
Forbes, Ill. Hort. Soc. f. 1905, 20.
Pickett, Ill. Hort. Soc. f. 1907, 385.
- Orgyia, *see* *Hemerocampa*
- Oriental cockroach, *see* *Blatta orientalis*
- Oriental moth, *see* *Cnidocampa flavescens*
- Oripoda elongata
Marlatt, U. S. B. 71, 136, 1907.
- Ormenis pruinosa
Felt, N. Y. St. Mus. Mem. 8, 598, 1906.

- Forbes, Ill. Ent. R. 23, 203, 1905.
 Gossard, J. Ec. Ent. IV, 209, 1911.
 Gossard, Ohio B. 233, 145, 1911.
 Stene, R. I. Bd. Agr. R. 23, 32, 1908.
- Ornithodoros megnini**
 Cary, Ala. Poly. B. 141, 145, 1907.
 Hunter & Bishopp, U. S. Y. B., '10, 222.
 Hunter & Hooker, U. S. B. 72, 45, 1907.
 Hooker, Bishopp & Wood, U. S. B. 106, 61, 1912.
 Kaupp, Anim. Parasites, 65, 1908.
 Mohler, U. S. B. An. I. B. 78, 1905, 15.
 Mohler, U. S. F. B. 258, 16, 1906.
 Mohler, U. S. F. B. 569, 10, 1914.
 Ransom, U. S. B. An. I. R. 1908, 505.
 ——— U. S. Y. B., 1907, 552.
 ——— U. S. Y. B., 1908, 580.
- Ornithodoros talaje**
 Jennings, Pr. Ent. Soc. Wash. XIV, 77, 1912.
- Ornithodoros turicata**
 Hunter & Hooker, U. S. B. 72, 46, 1907.
- Ornix geminatella**
 Felt, N. Y. R. 20, 404, 1905.
 Garman, Ky. B. 133, 14, 1908.
 Gossard, Ohio B. 233, 115, 1911.
 Haseman, J. Ec. Ent. VI, 313, 1913.
 Slingerland & Crosby, Man. Fr. Ins. 73, 1914.
- Ornix prunivorella**
 Haseman, Mo. Hort. Soc., 1911, 244.
- Orsodacna atra**
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 17.
- Orthezia insignis**
 Britton, Conn. B. 151, 4, 1905.
 Britton, Conn. R. 5, 235, 1906.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 167, 1907.
 Douglass, Ind. Ent. R. 4, 151, 1912.
 Essig, Cal. Hort. B. II, 1-2, 92, 1913.
 Sanders, J. Ec. Ent. II, 430, 1909.
 ——— C. Gentl., 1909, 320.
- Ortho-arsenate.** *Ammonia test* for
 Blake, N. J. Hort. Soc., 1912, 123.
- Ortho-arsenite of zinc**
 Britton, Conn. R. 11, 346, 1912.
 Cooley, J. Ec. Ent. V, 142, 1912.
- Ortho 40 Ortho Zinc Arsenite**
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 5, p. 69, 1914.
- Orthoperus scutellaris**
 Forbes, Ill. Ent. R. 23, 180, 1905.
- Orthoris crotchii**
 Pierce, U. S. B. 63, 44, 1907.
 Pierce, U. S. B. 73, 47, 1908.
 Pierce, U. S. B. 100, 79, 1912.
- Orthosoma brunneum**
 Felt, N. Y. St. Mus. Mem. 8, 487, 1906.
 Sanderson, U. S. B. 57, 39, 1906.
- Oscinis carbonaria**
 Bruner & Swenk, Nebr. B. 96, 26, 1907.
 Criddle, J. Ec. Ent. IV, 236, 1910.
 Criddle, Ont. Ent. Soc. R. 43, 98, 1913.
 Lochhead, Syn. Ec. Ent. 90, 1914.
 Fletcher, Can. Exp. Farms B. 52, 15, '05.
 Tucker, Can. Ent., 1911, 28.
 ——— U. S. Y. B., 1906, 510.
- Oscinis soror**
 Criddle, J. Ec. Ent. V, 249, 1912.
 Washburn, Minn. R. 10, 106, 1905.
 Washburn, U. S. B. 52, 56, 1905.
- Oscinis variabilis**
 Sanderson, Ins. Pests, 135, 1912.
- Osmoderma eremicola**
 Felt, N. Y. St. Mus. Mem. 8, 493, 1906.
- Osmoderma scabra**
 Felt, N. Y. St. Mus. Mem. 8, 492, 1906.
 Patch, Me. B. 162, 361, 1908.
- Ostoma pusilla**
 ——— U. S. Y. B., 1905, 630.
- Otiocerus coquebertii**
 Felt, N. Y. R. 26, 68, 1911.
- Otiorhynchus ovatus**
 Britton, Conn. R. 9, 371, 1910.
 Forbes, Ill. Ent. R. 23, 192, 1905.
 Gibson, Ont. Ent. Soc. R. 43, 13, 1913.
 Gossard, Ohio B. 233, 149, 1911.
 Hart, Ill. Ent. R. 26, 90, 1911.
 O'Kane, Inj. Ins. 230, 1914.
 Patch, Me. B. 123, 205, 1905.
 Pettit, Mich. B. 244, 217, 1907.
 Pettit, Mich. B. 251, 292, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 386, 1914.
 Treherne, Pr. Ent. Soc. B. C., 2, 41, '12.
 Treherne, Ont. Ent. Soc. R. 43, 109, '13.
 Treherne, Can. Exp. Farms Ent. B. 8, 9, 1914.
 Treherne, [Pr. Ent. Soc. B. C., 4, 26, 1914.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 122.

- U. S. Y. B., 1905, 630.
 ——— U. S. Y. B., 1906, 517.
 ——— U. S. Y. B., 1907, 552.
 ——— U. S. Y. B., 1908, 574.
- Otiorynchus sulcatus**
 Britton, Conn. R. 8, 846, 1909.
 Britton, Conn. R. 13, 230, 1914.
 Caesar, Ont. Ent. Soc. R. 42, 32, 1912.
 Johannsen, Me. B. 187, 8, 1911.
 Slingerland & Crosby, Man. Fr. Ins. 387, 1914.
 Swaine, Ont. Ent. Soc. R. 41, 99, 1911.
 Treherne, Can. Exp. Farms Ent. B. 8, 41, 1914.
 Treherne, Pr. Ent. Soc. B. C., 4, 27, '14.
 Venables, Pr. Ent. Soc. B. C., 1, 9, '11.
- Ox bot**, *see* **Hypoderma lineata**
- Ox warble**, *see* **Hypoderma lineata**
- Oxyptilus periscelidactylus**
 Douglass, Ind. Ent. R. 3, 198, 1910.
 O'Kane, Inj. Ins. 301, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 422, 1914.
 Smith, N. J. R., 1903, 321.
 Surface, Pa. D. A. Zoöl. I, 1, 35, 1911.
 ——— U. S. Y. B., 1907, 547.
 ——— U. S. Y. B., 1908, 576.
- Oyster-shell bark-louse**, *see* **Lepidosaphes ulmi**
- Ozamia lucidalis**
 Hunter, Pratt & Mitchell, U. S. B. 113, 36, 1912.
- Pachnaeus opalus**
 Watson, Fla. R., 1913, lxx.
- Pachymerus**, *see* **Bruchus**
- Pachynematus extensicornis**
 Gossard, Ohio B. 233, 69, 1911.
 Sanderson, Ins. Pests, 143, 1912.
- Pachyneuron micans**
 Herrick & Hungate, N. Y. C. B. 300, 736, 1911.
 Surface, Pa. D. A. Zoöl. V, 2, 58, 1907.
- Pachyneuron sp. on green bug**
 Webster & Phillips, U. S. B. 110, 127, 1912.
- Pachypsyla celtidis-mamma**
 Felt, N. Y. St. Mus. Mem. 8, 647, 1906.
- Pachyzancla bipunctalis**
 Chittenden, U. S. B. 109, 17, 1911.
 O'Kane, Inj. Ins. 185, 1914.
 ——— U. S. Y. B., 1906, 510.
- U. S. Y. B., 1908, 571.
- Pacoetia obsoletana**
 Douglass, Ind. Ent. R. 4, 227, 1912.
- Painted hickory borer**, *see* **Cyllene picta**
- Paleacrita vernata**
 Alderman, Giddings & Rumsey, W. Va. C. 7, 28, 1913.
 Bailey, Vt. Agr. R. 6, 37, 1914.
 Baldwin, Ind. Ent. R. 5, 60, 1912.
 Bethune, Ont. Agr. Coll. B. 153, 9, 1907.
 Britton, Conn. R. 8, 782, 1909.
 Britton, Conn. Farm., Apr. 9, 1910, 1.
 Buckley, Me. Dept. Agr. B., vol. X, 3, 2, 1911.
 Burgess, U. S. B. 52, 53, 1905.
 Burgess, Ohio Bd. Agr. R. 61, 657, 1906.
 Burgess, Ohio Nurs. Orch. Insp. R. 5, 17, 1907.
 Clinton & Britton, Conn. R. f. 1909 to 1910, 594, 1911.
 Cooper, Cal. Hort. Comm. Ins. & Insect., 1905, 12.
 Davis, J. Ec. Ent. III, 185, 1910.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 40, 1913.
 Douglass, Ind. Ent. R. 2, 61, 1910.
 Douglass, Ind. Ent. R. 3, 109, 1910.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 116, 1905.
 Essig, Cal. Hort. B. II, 1-2, 185, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 547, 1906.
 Felt, N. Y. R. 24, 45, 1909.
 Felt, C. Gentl., 1903, 603.
 Fernald, Mass. B. 125, 54, 1903.
 Forbes, Ill. B. 151, 485, 1911.
 Forbes, Ill. Ent. R. 26, 23, 1911.
 Fulton, Wright & Gregg, Pa. B. 110, 13, 1911.
 Garcia, N. Mex. B. 68, 40, 1903.
 Garman, Ky. B. 133, 32, 1903.
 Gossard, Am. Agric., July 13, 1907, 24.
 Gossard, Ohio B. 164, 14, 1905.
 Gossard, Or. Judd Farm., May 18, 1907, 660.
 Gossard, Ohio B. 198, 39, 1903.
 Gossard, Ohio B. 241, 1912.
 Gossard & Houser, Ohio C. 65, 1907.
 Haseman, Mo. Hort. Soc., 1911, 237.
 Herrick, N. Y. Dept. Agr. B. 62, 1831, 1914.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 339.

***Paleacrita vernata* (Cont'd)**

- Lamson, Conn. Storrs B. 71, 72, 1912.
 Lochhead, Syn. Ec. Ent. 59, 1914.
 Merrill, Kans. Farm., Apr. 4, 1914, 11.
 Moore, Wis. B. 190, 16, 1910.
 Moulton, Pac. Rur. Press, LXXVIII, 261, 1909.
 Nicholson, Okla. B. 76, 24, 1908.
 O'Kane, Inj. Ins. 279, 1914.
 Quaintance, Mich. Hort. Soc., 1905-1906, 129, 1907.
 Quaintance, U. S. B. 68, 17, 1907.
 Quaintance & Scott, U. S. F. B. 492, 18, 1912.
 Sanderson, Ins. Pests, 570, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 77, 1914.
 Smith, N. C. B. 206, 71, 1910.
 Stene, R. I. Bd. Agr. R. 21, 64, 1906.
 Stene, R. I. Nurs. Insp. 48, 1906.
 Stene, R. I. Bd. Agr. R. 25, 148, 1910.
 Surface, Pa. Dept. Agr. R. 14, 355, 1908.
 Tucker, Kans. Farm., Apr. 20, 1905, 414.
 Underwood, Am. Agric., Mar. 31, 1906, 429.
 Underwood, Or. Judd Farm., Mar. 31, 1906, 479.
 Underwood, Mich. Farm., Mar. 30, 1907, v. 51, p. 358.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 479, 1911.
 Whiteside, Mont. Bd. Hort. [f. 1907-1908, 47, 1909.
 ——— U. S. Y. B., 1905, 632.
 ——— U. S. Y. B., 1906, 512.
 ——— U. S. Y. B., 1907, 547.
 ——— U. S. Y. B., 1908, 575.

Pales pavid

- Howard & Fiske, U. S. B. 91, 235, 300, 1911.
Pale-striped flea-beetle*, see *Systema blanda
Pale tussock caterpillar*, see *Halisidota tessellaris
Pale-winged grasshopper*, see *Melanoplus uniformis
Pales weevil*, see *Hylobius pales
Palmer-worm*, see *Ypsolophus pometellus
Palm scale*, see *Eucalymnatus tessellatus
Palorus ratzeburgi
 Dean, Kans. Agr. Educ. I, 4, 56, 1909.
 Dean, Kans. B. 189, 212, 1913.

Pamera vincta

- Slingerland & Crosby, Man. Fr. Ins. 379, 1914.

Pamphilus dentatus

- Britton, J. Ec. Ent. V, 465, 1912.
 Britton, J. Ec. Ent. VI, 199, 1913.
 Walden, Conn. R. 12, 236, 1913.

Pamphilus fletcheri

- Slingerland & Crosby, Man. Fr. Ins. 321, 1914.

Pamphilus persicum

- Britton, Conn. R. 7, 285, '08.
 Britton, Conn. Farm., Feb. 22, 1908, 1.
 Britton, J. Ec. Ent. I, 314, 1908.
 Britton, J. Ec. Ent. III, 435, 1910.
 Britton, Conn. R. 10, 664, 1911.
 Clinton & Britton, Conn. R. f. 1909, 1910, 609, 1911.
 Ehrhorn, Pac. Rur. Press, LXXVI, 388, 1908.
 Henry, N. Y. Fr. Grow. Assoc., '08, 175.
 Jarvis, Conn. Storrs B. 56, 259, 1909.
 Slingerland & Crosby, Man. Fr. Ins. 287, 1914.
 Walden, U. S. B. 67, 85, 1907.
 Walden, J. Ec. Ent. I, 160, 1908.
 Walden, Conn. R. 11, 314, 1912.
 ——— U. S. Y. B., 1907, 547.

Pan-American Platypus*, see *Platypus compositus

Pandorus sphinx*, see *Pholus pandorus

Pangaeus bilineatus

- Swenk, Nebr. Ent. B. 1, 87, 1913.

Panchlora hyalina

- Felt, N. Y. St. Mus. B. 129, 33, 1909.
 Felt, N. Y. R. 24, 22, 1909.
 Felt, N. Y. St. Mus. B. 136, 38, 1912.
 Fernald, J. Ec. Ent. V, 247, 1912.
 Fernald, Mass. R. 24, 1, 84, 1912.

Pandetejus hilaris

- Felt, N. Y. St. Mus. Mem. 8, 436, 1906.

Paniscus geminatus

- Cushman, Pr. Ent. Soc. Wash. XV, 155, 1913.
 Webster, J. Ec. Ent. IV, 181, 1911.

Panthea furcilla

- Felt, N. Y. St. Mus. Mem. 8, 679, 1906.

Pantomorus fulleri*, see *Aramigus

Paonias excaecatus

- Garman, Ky. B. 133, 62, 1908.
 Gossard, Ohio. B. 233, 97, 1911.

Papaipema cataphracta

- Gibson, Ont. Ent. Soc. R. 36, 118, 1906.
 Gibson, Ont. Ent. Soc. R. 44, 17, 1914.
 Nash, Ont. Ent. Soc. R. 38, 25, 1908.
 Nash, Ont. Ent. Soc. R. 39, 12, 1909.
 Nash, Ont. Ent. Soc. R. 40, 15, 1910.
 Washburn, Minn. R. 12, 154, 198, 1908.
 Washburn, J. Ec. Ent. III, 166, 1910.
 Washburn, Minn. Ent. R. 13, 89, 1910.

Papaipema furcata

- Washburn, Minn. R. 12, 94, 155, 200, 1908.

Papaipema nebris, see Papaipema nitela**Papaipema nitela**

- Baldwin, Farm. Guide, Dec. 27, '13, 13.
 Baldwin, Ind. Ent. R. 6, 45, 1914.
 Barre & Conradi, S. C. B. 141, 30, 1909.
 Bethune, Ont. Agr. Coll. B. 171, 23, '09.
 Bruner & Swenk, Nebr. B. 96, 33, 1907.
 Chittenden, Ins. Inj. Veg., 199, 1907.
 Davis, Ill. Ent. R. 26, 147, 1911.
 Felt, N. Y. R. 20, 406, 1905.
 Felt, U. S. B. 52, 51, 1905.
 Felt, Gard. Mag., Aug. 1905, 39.
 Felt, N. Y. R. 21, 94, 1906.
 Fletcher, Ont. Ent. Soc. R. 36, 82, 1906.
 Forbes, Ill. Ent. R. 23, 44, 1905.
 Franklin, Minn. Ent. R. 12, 197, 1908.
 Gossard, O. Farm., July 4, 1908, 3.
 Gossard, Ohio B. 233, 62, 1911.
 Howard, U. S. R. Ent., 1906, 22.
 Jarvis, Ont. Ent. Soc. R. 37, 49, 1907.
 Jarvis, Conn. Storrs B. 56, 264, 1909.
 Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 14, 1906.
 Lovett, Oreg. Coll. B. 91, 14, 1913.
 Morgan, U. S. Y. B., 1910, 293.
 Nash, Ont. Ent. Soc. R. 39, 12, 1909.
 O'Kane, Inj. Ins. 132, 1914.
 Patch, Me. B. 123, 214, 1905.
 Pettit, Mich. B. 233, 213, 1906.
 Quaintance & Brues, U. S. B. 50, 106, 1905.
 Sanderson, U. S. F. B. 223, 17, 1905.
 Sanderson, U. S. B. 57, 39, 1906.
 Sanderson, Ins. Pests, 287, 1912.
 Sherman, N. C. Dept. Agr. B. 29, 6, 51, '08.
 Sherman, Prog. Farm., May 7, 1908, 3.
 Sherman, Prog. Farm., July 18, '14, 803.
 Smith, N. J. R., 1905, 584.
 Smith, Nebr. Ins. Pest Bur. C. 8, 3, '08.
 Stedman, Mo. Bd. Agr. R. 38, 289, 1906.

Surface, Nat'l Stockm. & Farm., July 5, 1906, 17.

Surface, Pa. D. A. Zoöl. V, 4, 115, 1907.

Surface, Pa. D. A. Zoöl. I, 4, 198, 1911.

Swenk, Nebr. Hort. Soc., 1909, 91.

Swenk, Nebr. Ent. B. 1, 82, 1913.

Symons, Md. B. 101, 164, 1905.

Washburn, Minn. Ent. R. 11, 62, 1906.

Washburn, U. S. B. 60, 85, 1906.

Washburn, Minn. P. B. 28, 8, 1907.

Washburn, Minn. R. 12, 152, 1908.

Washburn, J. Ec. Ent. III, 165, 1910.

Washburn, Minn. Ent. R. 13, 88, 1910.

Webster, J. Ec. Ent. II, 210, 1909.

Weiss, N. J. R., 1912, 440.

Weldon, Md. Hort. Soc., 1907, 61, 1908.

——— U. S. Y. B., 1905, 630.

——— U. S. Y. B., 1906, 510, 511.

——— U. S. Y. B., 1907, 545.

——— U. S. Y. B., 1908, 573.

Papaipema purpurifascia

Gibson, Ont. Ent. Soc. R. 35, 81, 1905.

Gibson, Ont. Ent. Soc. R. 36, 118, 1906.

Nash, Ont. Ent. Soc. R. 39, 12, 1909.

Papaipema sp.

Washburn, Minn. Ent. R. 13, 85, 1910.

Papaipema spp.

Washburn, Minn. R. 12, 151, 1908.

Papilio asterias, see P. polyxenes**Papilio glaucus**

Garman, Ky. B. 133, 62, 1908.

Papilio polyxenes

Barre & Conradi, S. C. B. 141, 29, 1909.

Bethune, Ont. Agr. Coll. B. 17, 20, '09.

Chittenden, Ins. Inj. Veg., 179, 1907.

Chittenden, U. S. B. 82, 20, 1909.

Essig, Cal. Hort. B. II, 1-2, 197, 1913.

Fulton, Wright & Gregg, Pa. B. 110, 21, 1911.

Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 13, 1906.

O'Kane, Inj. Ins. 170, 1914.

Pettit, Mich. B. 233, 179, 190, 1906.

Price, Va. C. 59, 1909.

Sanderson, Ins. Pests, 411, 1912.

Smith, N. C. B. 197, 30, 1908.

Papilio thoas

Felt, N. Y. St. Mus. Mem. 8, 554, 1906.

Quarles, Tex. Stockm. Farm., July 12, 1911, 13.

Papilio zolicaon

Essig, Cal. Hort. B. II, 1-2, 198, 1913.

- Parabolocratus viridis**
Osborn, U. S. B. 108, 68, 1912.
- Paracalacoris colon**
Bethune, Ont. Agr. Coll. R. 38, 27, 1913.
Caesar, Ont. Ent. Soc. R. 43, 103, 1913.
Parrott, J. Ec. Ent. VI, 64, 1913.
Parrott & Hodgkiss, N. Y. St. B. 368, 383, 1913.
- Paracalacoris scrupeus**
Felt, N. Y. Fr. Grow. Assoc., 1914, 24.
Parrott & Hodgkiss, N. Y. St. B. 368, 384, 1913.
- Paraclemensia acerifoliella**, *see* *Incurvaria*
- Paradejeania rutilioides**
Essig, Cal. Hort. B. II, 1-2, 261, 1913.
- Paraffine oil**
Jarvis, Conn. Storrs B. 54, 188, 1908.
Yothers, U. S. C. 168, 5, 1913.
- Paraffine oil and rosin oil**
Penny, Pa. B. 86, 12, 1908.
- Paragrotis**, *see* *Euxoa*
- Parajulus diversifrons**
Forbes, Ill. Ent. R. 23, 223, 1905.
- Parajulus impressus**
Sanderson, Ins. Pests, 301, 1912.
- Parajulus venustus**
Forbes, Ill. Ent. R. 23, 223, 1905.
- Paralechia pinifoliella**
Felt, N. Y. St. Mus. Mem. 8, 681, 1906.
Swaine, Ont. Ent. Soc. R. 43, 90, 1913.
- Paraleyrodes perseae**
Morrill & Back, U. S. B. 92, 10, 1911.
Watson, Fla. B. 123, 3, 1914.
- Paranaemia vittigera**
Essig, Cal. Hort. B. II, 1-2, 201, 1913.
- Parandra brunnea**
Gahan, J. Ec. Ent. IV, 299, 1911.
Hart, Ill. Ent. R. 26, 68, 1911.
Snyder, U. S. B. 94, 1, 1910.
Snyder, U. S. C. 134, 3, 1911.
- Paraptochus sellatus**
Wilson, Oreg. Bien. Crop Pest. R. f. 1913-1914, 197.
- Parasa chloris**
Murtfeldt, Col. Rur. World, Aug. 30, 1911, 274.
- Parasetigena segregata**
Howard & Fiske, U. S. B. 91, 159, 229, 1911.
- Parasetigena sp.**
Howard, Mass. For. R. 7, 95, 1911.
- Parasites**, *use of*
Ball, Deseret Farm., Feb. 1, 1908, 6.
Howard, Mass. Hort. Soc. f. 1906, I, 11.
Herrick, Rur. N. Y., 1909, 861.
Smith, N. J. Bd. Agr. R. 35, 177, 1908.
Smith, Pac. Rur. Press, LXXXVIII, 626, 1914.
- Parasitus coleoptratorum**
Graf, U. S. B. 123, 19, 1914.
- Paratenetus punctatus**
Felt, N. Y. St. Mus. Mem. 8, 606, '06.
- Paratenodera**, *see* *Tenodera*
- Paratettix cucullatus**
Morgan, U. S. Y. B., 1910, 292.
- Parexorista cheloniae**
Gill, U. S. B. 116, 102, 1913.
Hitchings, Me. Ent. R. 3, 11, 1908.
Howard, U. S. R. Ent., 1911, 10.
Howard & Fiske, U. S. B. 91, 204, 297, 1911.
Kirkland, Mass. G. & B-T R. 4, 62, '09.
- Parharmonia pini**
Felt, N. Y. St. Mus. Mem. 8, 341, 1906.
- Paria aterrima**
Adams, Ark. B. 92, 16, 1907.
Herrick, Rur. N. Y., 1910, 193.
Oskamp, Ind. B. 164, 763, 1913.
- Paris green**
Britton, Conn. Farm., Mar. 28, 1908, 1.
Garman, Ky. B. 147, 9, 1910.
Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 3, 1907.
Jarvis, Conn. Storrs B. 56, 224, 1909.
Jordan, Stewart & Eustace, N. Y. St. B. 267, 266, 1905.
Lochhead, Can. Hort. XXVIII, 133, '05.
Luther, Pac. Rur. Press, LXXV, 245, 1908.
Metcalf, N. C. Dept. Agr. Sp. B. 17, '09.
Morris & Parker, Mont. C. 36, 226, '14.
Pickett, Ill. Hort. Soc. f. 1907, 379.
Rogers, Pa. Dept. Agr. B. 190, 42, 1910.
Sherman & Woglum, N. C. Ent. C. 17, 4, 1906.
Slingerland & Crosby, N. Y. C. B. 252, 346, 1908.
Slingerland, Herrick & Crosby, N. Y. C. B. 283, 476, 1910.
Smith, N. J. R., 1906, 583.
Smith, N. J. B. 213, 8, 1908.
Stone & Fernald, Mass. B. 123, 7, 1908.

Paris green (*Cont'd*)

Van Buren & Husted, N. Y. Dept.
Agr. B. 24, 484, 1911.

Warren, N. J. B. 194, 44, 1906.

Woods & Hanson, Me. B. 154, 100, '08.

—— U. S. D. A. Ins. & Fung. No. 3, '12.

—— U. S. D. A. Ins. & Fung. No. 40.
1912.

—— U. S. D. A. Ins. & Fung. Nos.
13, 20, 21, 1913.

Paris green, analyses

Cathcart, N. J. B. 214, 1908.

Cathcart, N. J. B. 222, 1909.

Fuller, Pa. Dept. Agr. B. 166, 3, 1908.

Fuller, Pa. Dept. Agr. B. 176, 9, 1908.

Kellogg, Pa. Dept. Agr. B. 192, 10, 1910.

Kellogg, Pa. Dept. Agr. B. 204, 9, 1910.

Street, Conn. Ent. R. 7, 326, 1907.

Street, Conn. B. 157, 8, 1907.

Street, Conn. R. 7, 326, 1908.

Surface, Pa. D. A. Zoöl. VI, 2, 58, 1908.

Woodworth, Cal. B. 182, 177, 1906.

Paris green and lime

Mich. Sp. B. 51, 434, 1910.

Paris green, plaster of Paris, sand and calcium carbonate

—— U. S. D. A. Ins. & Fung. Bd. Ins.
1, p. 2, 1914.

Parlatoria blanchardi

Cockerell, Ariz. B. 56, 186, 1907.

Cook, Cal. Hort. B. III, 10, 440, 1914.

Essig, Cal. Hort. B. II, 1-2, 139, 1913.

Forbes, Ariz. B. 56, 193, 1907.

Forbes, Ariz. B. 60, 435, 1909.

Forbes, J. Ec. Ent. VI, 415, 1913.

Forbes, S. W. Stockm., Mar. 20, '14, 11.

Wilsie, Cal. Hort. B. II, 5, 538, 1913.

—— U. S. Fed. Hort. Bd. Quar. Not.
6, 1913.

—— U. S. Y. B., 1907, 548.

Parlatoria pergandii

Britton, Conn. B. 151, 16, 1905.

Britton, Conn. R. 5, 245, 1906.

Carnes, Cal. Hort. Comm. Bien. R. 2,
221, 1907.

Davis, Ill. Ent. R. 27, 129, 1912.

Essig, Pom. Jr. Ent. I, 33, 1909.

Essig, Cal. Hort. B. II, 1-2, 141, 1913.

Gahan, Md. B. 119, 9, 1907.

Morrison, Ind. Ent. R. 6, 77, 1914.

Newell & Barber, U. S. B. 122, 64,
1913.

Parlatoria proteus

Davis, Ill. Ent. R. 27, 129, 1912.

Parlatoria proteus palmae

Cockerell, Ariz. B. 56, 186, 1907.

Parlatoria sp.

Morrill, Ariz. Comm. Agr. & Hort. R.
6, 17, 1914.

Parlatoria victrix

Cockerell, Ariz. B. 56, 185, 1907.

Parlatoria zizyphus

Berger, Fla. R., 1907, xxxviii.

Cockerell, Ariz. B. 56, 185, 1907.

Parsley caterpillar, *see* *Papilio polyxenes*

Parsnip leaf-miner, *see* *Acidia fratria*

Parsnip webworm, *see* *Depressaria heraciana*

Passalus cornutus

Felt, N. Y. St. Mus. Mem. 8, 492, 1906.

Paururus cyaneus

Felt, N. Y. St. Mus. Mem. 8, 669, 1906.

Pea aphid, *see* *Macrosiphum pisi*

P E A Co. Brand Insect Powder

—— U. S. D. A. Ins. & Fung. No. 78,
1913.

Pea moth, *see* *Cydia nigricans*

Pea weevil, *see* *Bruchus pisorum*

Peach bark-beetle, *see* *Phloeotribus liminaris*

Peach borer, *see* *Sanninoidea exitiosa*

Peach bud mite, *see* *Tarsonemus waitei*

Peach insects

Clay, Tex. Agr. & Statis. R. 1905, 271.

Douglass, Ind. Ent. R. 4, 41, 1912.

Krider, Farm. Guide, Mar. 30, 1912, 5.

Parrott, Pr. N. Y. Fr. Grow. Assoc., 10th
Meet., 208, 1912.

Quaintance, U. S. Y. B., 1905, 325.

Quaintance, Better Fr., June 1909, 11.

Smith, N. J. B. 235, 1911.

Smith, N. J. Hort. Soc., 1911, 83.

Surface, Pa. D. A. Zoöl. I, 1, 48, 1911.

Surface, Pa. D. A. Zoöl. II, 6, 247, 1912.

Stone & Fernald, Mass. B. 123, 24, 1908.

Warren, N. J. B. 197, 34, 1906.

Weed, Nat'l Stockm. & Farm., Dec. 26,
1914, 11.

Weldon, Better Fr., June 1911, 27.

Worsham, Ga. Bd. Ent. B. 30, 104, '09.

Worsham, Pr. Ga. Hort. Soc., 1909,
104.

Peach lecanium, *see* *Eulecanium nigrofasciatum*

- Peach scale, West Indian, see** *Aulacaspis pentagona*
- Peach slug, see** *Caliroa amygdalina*
- Peach soft scale, see** *Eulecanium persicae*
- Peach-tree bark-beetle, see** *Phloeotribus liminaris*
- Peach tree borer, see** *Sanninoidea exitiosa*
- Peach twig-borer, see** *Anarsia lineatella*
- Peach-twig moth, see** *Anarsia lineatella*
- Peanut insects**
Beattie, U. S. F. B. 356, 38, 1909.
- Pear-blight beetle, see** *Xyleborus pyri*
- Pear insects**
Brackett, U. S. F. B. 482, 20, 1912.
Clay, Tex. Agr. & Statis. R. 271, 1905.
Stone & Fernald, Mass. B. 123, 25, '08.
Surface, Pa. D. A. Zool. I, 1, 48, 1911.
- Pear-leaf blister-mite, see** *Eriophyes pyri*
- Pear-leaf rust-mite, see** *Epitrimerus pyri*
- Pear midge, see** *Contarinia pyrivora*
- Pear psylla, see** *Psylla pyricola*
- Pear scale, Italian, see** *Epidiaspis piricola*
- Pear slug, see** *Caliroa cerasi*
- Pear thrips, see** *Euthrips pyri*
- Pecan insects**
Chittenden, Nut Grow., Jan. 1906, 106.
Dew, Ala. Hort. Soc. R. 11, 33, 1914.
Edwards, Farm & Ranch, June 10, 1911, 10.
Edwards, Farm & Ranch, June 24, 1911, 10.
Gossard, Fla. B. 79, 1905.
Halbert, Tex. Stockm. Farm., Dec. 4, 1912, 2.
Williams, Ala. Poly. B. 155, 46, 1911.
Worsham, Ga. Bd. Ent. B. 33, 118, 1910.
- Pecan weevil, see** *Balaninus caryae*
- Pediculoides dianthophilus**
Burnett, Nebr. R. 21, xix, 1908.
Wolcott, Nebr. B. 103, 30, 1908.
- Pediculoides sp.**
Hunter & Pierce, U. S. B. 114, 137, 1912.
Wolcott, Nebr. B. 103, 25, 1908.
- Pediculoides ventricosus**
Chittenden, U. S. B. 96, 73, 1911.
Chittenden, U. S. B. 104, 31, 1911.
Dietz, Ind. Ent. R. 5, 186, 1912.
Goldberger, Pub. Health R. XXIV, 973, 1909.
Goldberger, Pub. Health R. XXV, 779, 1910.
Herrick, Household Ins. 347, 1914.
- Houser, Ohio B. 226, 197, 1911.
Howard, U. S. R. Ent., 1910, 26.
Howard, U. S. R. Ent., 1911, 24.
Howard & Fiske, U. S. B. 91, 267, 1911.
Hunter & Hinds, U. S. B. 51, 146, 1905.
Hunter & Pierce, U. S. B. 114, 137, '12.
Jeffrey, Cal. Hort. Comm. Bien. R. 1, 164, 1905.
Marlatt, U. S. B. 71, 137, 1907.
Pierce, U. S. B. 73, 10, 40, 1908.
Pierce, U. S. B. 100, 44, 1912.
Schamberg, J. Cutan. Dis., Feb. 1910, 67.
Schamberg, Pr. Path. Soc. Phila., XIII, 63, 1910.
Smith, U. S. B. 67, 102, 1907.
Webster, U. S. C. 66, Rev. Ed., 4, 1908.
Webster, U. S. C. 106, 10, 1909.
Webster, Ann. Ent. Soc. Am. III, 15, '10.
Webster, U. S. Bur. Ent. C. 118, 1910.
Webster, U. S. B. 118, 1, 1910.
Webster, U. S. B. 112, 32, 1912.
Wolcott, Nebr. B. 103, 26, 1908.
- Pediculopsis graminum**
Davis, Ill. Ent. R. 27, 139, 1912.
Hodgkiss, J. Ec. Ent. I, 375, 1908.
Stewart & Hodgkiss, N. Y. St. Tech. B. 7, 105, 1908.
- Pediculus capitis**
Dietz, Ind. Ent. R. 5, 188, 1912.
Herrick, Household Ins. 307, 1914.
Smith, N. J. B. 203, 25, 1907.
Surface, Pa. D. A. Zool. III, 1, 28, 1913.
Whitmarsh, Ohio B. 253, 130, 1912.
- Pediculus capitis and leprosy**
Howard & Clark, J. Exper. Med., Dec. 1912, 850.
McCoy, Pub. Health R. XXVII, 1464, '12.
- Pediculus capitis and typhus**
Goldberger, Pub. Health R. XXVII, 297, 1912.
Hewitt, Can. Ent., 1912, 103.
Ricketts, J. Amer. Med. Assoc., liv, 1304, 1910.
- Pediculus corporis, see** *Pediculus vestimenti*
- Pediculus humanus, see** *Pediculus capitis*
- Pediculus sp.**
Allen, Post Graduate (N. Y.) XX, 46, 1905.
Emerson, Johns Hopkins Hosp. Bull. XVII, 238, 1906.
McIntyre, Ill. Med. Bull. VI, 370, 1905.

- Rosenau, Prevent. Med., 268, 1913.
 Sobel, N. Y. City Dept. Health R. s, no. 12, 1913.
- Pediculus vestimenti**
 Dietz, Ind. Ent. R. 5, 188, 1912.
 Girault, Ent. News, 1912, 339.
 Herrick, Household Ins. 311, 1914.
 Smith, N. J. B. 203, 26, 1907.
 Surface, Pa. D. A. Zoöl. III, 1, 27, 1913.
 Whitmarsh, Ohio B. 253, 131, 1912.
- Pediculus vestimenti and typhus**
 Ricketts, J. Amer. Med. Assoc., LIV, 1304, 1910.
- Pegomyia bicolor**
 Fletcher, Ont. Ent. Soc. R. 35, 51, 1905.
- Pegomyia brassicae**
 Barre & Conradi, S. C. B. 141, 28, 1909.
 Bethune, Ont. Agr. Coll. B. 171, 19, '09.
 Britton, Conn. Farm., May 24, 1913, 3.
 Britton & Walden, Conn. R. 13, 232, '14.
 Caesar, Ont. Ent. Soc. R. 42, 32, 1912.
 Cardiff, Wash. B. 118, 14, 1914.
 Chittenden, U. S. C. 63, 3, 1905.
 Chittenden, U. S. C. 63, 2nd Ed., 3, '06.
 Chittenden, Ins. Inj. Veg. 131, 1907.
 Close & White, Md. B. 133, 195, 1909.
 Conradi, Tex. B. 89, 11, 1907.
 Cooley, Mont. B. 92, 60, 1912.
 Davis, J. Ec. Ent. III, 180, 1910.
 Davis, Ill. Ent. R. 26, 108, 1911.
 Essig, Cal. Hort. B. II, 1-2, 256, 1913.
 Fernald, Mass. C. 5, 1907.
 Fletcher, Can. Exp. Farms B. 52, 35, '05.
 Fletcher, Can. Hort. XXXI, 83, 120, '08.
 Fulton, Wright & Gregg, Pa. B. 110, 21, 1911.
 Gibson, Can. Hort. XXXIII, 145, 1910.
 Gibson, Ont. Ent. Soc. R. 42, 10, 1912.
 Gillette, U. S. B. 52, 59, 1905.
 Gossard, J. Ec. Ent. I, 186, 1908.
 Herrick, N. Y. Veg. Grow. Assoc., 1913-1914, 180.
 Jarvis, Ont. Ent. Soc. R. 37, 49, 1907.
 Jarvis, Conn. Storrs B. 56, 247, 1909.
 Jarvis, Conn. Farm., June 11, 1910, 7.
 Jordan, N. Y. St. B. 393, 650, 1914.
 Judson, N. Y. C. B. 292, 260, 1911.
 Lane, Can. Hort. XXXI, 120, 1908.
 Legate, Mass. Crop R. f. May 1911, 39.
 Lochhead, Ont. Ent. Soc. R. 35, 29, '05.
 Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 10, 27, 1906.
- Lovett, Northw. Hort., June 1913, 154.
 Lovett, The Ranch, June 15, 1913, 12.
 Lovett, Oreg. Coll. B. 91, 17, 1913.
 Manns, Ohio B. 228, 281, 1911.
 Moore, Minn. R. 15, 67, 1914.
 O'Kane, Inj. Ins. 118, 1914.
 Parrott, N. Y. Dept. Agr. B. 62, 1829, 1914.
 Pettit, Mich. B. 233, 166, 1906.
 Price, Va. C. 7, 58, 1909.
 Sanborn, Okla. B. 100, 20, 1912.
 Sanderson, N. H. B. 129, 264, 1907.
 Sanderson, Ins. Pests, 347, 1912.
 Schoene, N. Y. St. B. 301, 165, 1908.
 Schoene, J. Ec. Ent. IV, 210, 1911.
 Schoene, N. Y. St. B. 382, 231, 1914.
 Sherman, N. C. Dept. Agr. B. 32, 7, 33, 1911.
 Slingerland, Rur. N. Y., 1905, 339, 552.
 Slingerland, Rur. N. Y., 1906, 520.
 Slingerland, Rur. N. Y., 1908, 259.
 Slingerland & Crosby, N. Y. C. B. 252, 345, 1908.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 470, 1910.
 Smith, N. J. R., 1906, 550.
 Smith, N. J. B. 200, 5, 1907.
 Smith, N. J. R., 1908, 349.
 Smith, N. C. B. 197, 28, 1908.
 Smith, N. J. R., 1909, 384, 390.
 Smith, N. J. R., 1910, 358.
 Stillman, The Ranch, June 1, 1911, 2.
 Stookey, The Ranch, July 1, 1913, 6.
 Surface, Pa. D. A. Zoöl. III, 4, 116, 1905.
 Surface, Pa. D. A. Zoöl. IV, 11, 385, '07.
 Surface, Pa. D. A. Zoöl. V, 12, 374, 1908.
 Surface, Pa. D. A. Zoöl. I, 1, 22, 1911.
 Surface, Pa. D. A. Zoöl. II, 4, 180, 1911.
 Symons, Md. B. 101, 183, 1905.
 Symons & Gahan, Md. Hort. Soc., 1904, 35, 1905.
 Tong, C. Gentl., 1909, 430.
 Treherne, Pr. Ent. Soc. B. C., 4, 28, '14.
 Washburn, Minn. R. 10, 122, 1905.
 Washburn, Minn. P. B. 25, 1906.
 Washburn, Minn. Ent. R. II, 1, 1906.
 Washburn, U. S. B. 60, 88, 1906.
 Washburn, U. S. B. 67, 13, 1907.
 Washburn, Kans. Farm., July 30, 1908, 820.
 Washburn, Minn. R. 12, 122, 1908.
 Washburn, Minn. Ent. R. 13, 43, 1910.

- White, Rur. N. Y., 1910, 1072.
 Wilson, Oreg. Bien. Crop Pest R. f.
 1911-1912, 138.
 ——— Farm. Advocate, Can., '11, 1022.
 ——— Rur. N. Y., 1910, 412.
 ——— U. S. Y. B., 1906, 511.
 ——— U. S. Y. B., 1907, 546.
 ——— U. S. Y. B., 1908, 571.
- Pegomyia ceparum**, *see* **Phorbia**
Pegomyia cepetorum, *see* **Phorbia**
Pegomyia cerealis
 Gillette, Colo. R. 20, 25, 1907.
- Pegomyia fusciceps**
 Barre & Conradi, S. C. B. 141, 40, '09.
 Berger, Fla. R. 1908, lx.
 Chittenden, U. S. C. 63, 1, 1905.
 Chittenden, U. S. C. 63, 2nd Ed., 1, '06.
 Chittenden, Ins. Inj. Veg., 106, 135, '07.
 Chittenden, U. S. B. 66, 96, 1909.
 Chittenden, Va. Truck Exp. Sta. B. 2,
 34, 1909.
 Chittenden, U. S. Y. B., 1912, 327.
 Conradi, Tex. B. 89, 32, 1907.
 Felt, C. Gentl., 1910, 660.
 Fletcher, Can. Exp. Farms B. 52, 34, '06.
 Forbes, Ill. Ent. R. 23, 70, 1905.
 Gibson, Ont. Ent. Soc. R. 41, 12, 1911.
 Gossard, Ohio B. 198, 34, 1908.
 Hewitt, Ont. Ent. Soc. R. 41, 56, 1911.
 Johannsen, Me. B. 187, 5, 1911.
 Johannsen & Patch, Me. B. 195, 238, '11.
 Judson, N. Y. C. B. 292, 261, 1911.
 Kohler, Iowa Agric., Nov. 1905, 83.
 Lochhead, Ont. Ent. Soc. R. 36, 131, '06.
 O'Kane, Inj. Ins. 121, 1914.
 Pettit, Mich. B. 251, 287, 1908.
 Pettit, Mich. B. 258, 274, 1910.
 Popenoe, Kans. Farm., June 13, '07, 705.
 Quaintance & Jenne, U. S. B. 103, 151,
 1912.
 Sanborn, Okla. B. 100, 34, 1912.
 Sanderson, Ins. Pests, 320, 1912.
 Schoene, N. Y. St. B. 301, 165, 1908.
 Sellards, Fla. R. 1905, 19.
 Smith, N. J. R., 1909, 390.
 Smith, N. J. R., 1910, 358.
 Stedman, Mo. Bd. Agr. R. 38, 242, '06.
 Swenk, Nebr. Bd. Agr. R., 1909, 242.
 Troop, Ind. Farm., June 11, 1910, 9.
 Webster, J. Ec. Ent. III, 502, 1910.
 Weiss, N. J. R., 1912, 449.
 ——— U. S. Y. B., 1905, 630.
- U. S. Y. B., 1906, 511.
 ——— U. S. Y. B., 1907, 546.
 ——— U. S. Y. B., 1908, 572.
- Pegomyia lupini**
 Chittenden, U. S. B. 64, 35, 1908.
- Pegomyia planipalpis**
 Chittenden, U. S. B. 66, 96, 1909.
 Hyslop, U. S. B. 95, 105, 1912.
 ——— U. S. Y. B., 1907, 546.
- Pegomyia ruficeps**
 Houghton, Del. R. 16-17-18, 90, 1907.
- Pegomyia sp.**
 Gossard, O. Farm., July 26, 1913, 59.
- Pegomyia sp. on turnip**
 Gilbert, Amer. Cult., June 17, 1911, 4.
- Pegomyia spp.**
 Schoene, N. Y. St. B. 334, 16, 1911.
- Pegomyia vicina**
 Bethune, Ont. Agr. Coll. B. 171, 14, '09.
 Chittenden, Ins. Inj. Veg. 128, 1907.
 Conradi, Tex. B. 89, 5, 1907.
 Gillette, U. S. B. 52, 61, 1905.
 Johannsen & Patch, Me. B. 195, 238, '11.
 Lochhead & Jarvis, Ont. Agr. Coll. B.
 150, 8, 1906.
 Morris, Ont. Ent. Soc. R. 44, 24, 1914.
 O'Kane, Inj. Ins. 189, 1914.
 Pettit, Mich. B. 233, 161, 1906.
 Sanderson, Ins. Pests, 345, 1912.
 Smith, N. C. B. 197, 16, 1908.
 Smith, N. J. R., 1909, 387.
 Smith, N. J. R., 1911, 444.
 ——— C. Gentl., 1907, 638.
 ——— C. Gentl., 1910, 622.
 ——— U. S. Y. B., 1906, 510.
 ——— U. S. Y. B., 1907, 544.
 ——— U. S. Y. B., 1908, 571.
- Pelecinius polyturator**
 Woods, Me. B. 137, 286, 1906.
- Peleteria robusta**
 Essig, Cal. Hort. B. II, 1-2, 260, 1913.
- Peleteria tessellata**
 Cooley, Mont. B. 71, 146, 1908.
- Pelidnota punctata**
 Bethune, Ont. Agr. Coll. B. 158, 28, '07.
 O'Kane, Inj. Ins. 263, 1914.
- Pellagra**, *see* **Simulium**
- Pellucid grasshopper**, *see* **Camnula pellu-**
cida
- Pempelia hammondi**, *see* **Canarsia**
- Pemphigus acerifolii**
 Felt, C. Gentl., 1905, 689, 932.

***Pemphigus acerifolii* (Cont'd)**

- Felt, N. Y. St. Mus. Mem. 8, 195, 1905.
 Felt, N. Y. R. 21, 98, 1906.
 Felt, N. Y. St. Mus. Mem. 8, 600, 1906.
 Felt, U. S. B. 60, 90, 1906.
 Jackson, Pr. Columbus Hort. Soc., '07, 209.
 Johannsen & Patch, Me. B. 195, 236, '11.
 Patch, Me. B. 109, 179, 1905.
 Patch, Me. B. 134, 216, 1906.
 Patch, J. Ec. Ent. II, 35, 1909.
 Patch, Me. B. 195, 244, 1911.
 Patch, Me. B. 203, 235, 1913.
 Pergande, Tech. B. 24, U.S. Bur. Ent., '12.
 Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
 Washburn, Minn. R. 12, 101, 1908.
 ——— C. Gentl., 1910, 603.

Pemphigus aceris

- Jackson, Columbus Hort. Soc., 1907, 213.

Pemphigus attenuatus*, see *Neoprociphilus***Pemphigus betae***

- Adams, Cal. Cult., XLI, 258, 1913.
 Chittenden, Ins. Inj. Veg., 129, 1907.
 Essig, Cal. Hort. B. II, 1-2, 53, 1913.
 Cooley, Mont. B. 88, 90, 1912.
 Cooley, Mont. B. 92, 57, 1912.
 Cooley, Mont. B. 98, 125, 1914.
 Gillette, Colo. R. 21, 133, 1908.
 Gillette, Colo. R. 24, 28, 1911.
 Jackson, Pr. Columbus Hort. Soc., 1907, 217.
 O'Kane, Inj. Ins. 113, 1914.
 Parker, J. Ec. Ent. VII, 136, 1914.
 Sanderson, Ins. Pests, 330, 1912.
 ——— U. S. Y. B., 1906, 510.

Pemphigus bursarius

- Patch, Me. B. 213, 78, 1913.

Pemphigus californicus

- Essig, Cal. Hort. B. II, 1-2, 53, 1913.

Pemphigus corrugatus

- Jackson, Pr. Columbus Hort. Soc., 1907, 216.

Pemphigus formicarius

- Jackson, Pr. Columbus Hort. Soc., 1907, 197.

Pemphigus formicetorum

- Jackson, Pr. Columbus Hort. Soc., 1907, 198.

Pemphigus fraxinifolii

- Jackson, Pr. Columbus Hort. Soc., 1907, 211.
 Morrison, Ind. Ent. R. 5, 203, 1912.
 Swenk, Nebr. Hort. Soc., 1909, 104.

Pemphigus gravicornis

- Patch, Me. B. 213, 75, 1913.

Pemphigus imbricator

- Felt, N. Y. R. 26, 65, 1911.
 Jackson, Pr. Columbus Hort. Soc., 1907, 188.

Pemphigus popularius

- Jackson, Pr. Columbus Hort. Soc., 1907, 190.

Pemphigus populicaulis

- Essig, Cal. Hort. B. II, 1-2, 53, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 636, 1906.
 Jackson, Pr. Columbus Hort. Soc., 1907, 191.
 Patch, Me. B. 213, 77, 1913.

Pemphigus populoconduplicifolius

- Davidson, J. Ec. Ent. III, 374, 1910.
 Jackson, Pr. Columbus Hort. Soc., 1907, 217.

- Patch, Me. B. 213, 76, 1913.

Pemphigus populiglobuli

- Jackson, Pr. Columbus Hort. Soc., 1907, 196.

Pemphigus populimonilis

- Essig, Cal. Hort. B. II, 1-2, 55, 1913.
 Jackson, Pr. Columbus Hort. Soc., 1907, 204.
 Patch, Me. B. 213, 73, 1913.

Pemphigus populiramulorum

- Jackson, Pr. Columbus Hort. Soc., 1907, 208.

Pemphigus populitransversus

- Felt, N. Y. St. Mus. Mem. 8, 635, 1906.
 Felt, N. Y. R. 25, 83, 1910.
 Jackson, Pr. Columbus Hort. Soc., 1907, 206.

Pemphigus populivenae

- Jackson, Pr. Columbus Hort. Soc., 1907, 194.

Pemphigus pseudobyrza

- Jackson, Pr. Columbus Hort. Soc., 1907, 199.

Pemphigus rhois

- Felt, N. Y. St. Mus. Mem. 8, 647, 1906.
 Jackson, Pr. Columbus Hort. Soc., 1907, 202.
 Johannsen & Patch, Me. B. 195, 236, 1911.
 Patch, Me. B. 187, 22, 1911.

Pemphigus rubi

- Jackson, Pr. Columbus Hort. Soc., 1907, 212.

- Pemphigus tessellata**, *see* **Pemphigus acerifolii**
- Pemphigus ulmifusus**
 Felt, N. Y. R. 21, 100, 1906.
 Felt, N. Y. St. Mus. Mem. 8, 633, 1906.
 Felt, N. Y. R. 25, 83, 1910.
 Gibson, Ont. Ent. Soc. R. 40, 13, 1910.
 Jackson, Pr. Columbus Hort. Soc., 1907, 204.
 Patch, Me. B. 181, 220, 1910.
 Washburn, U. S. B. 60, 85, 1906.
- Pemphigus vagabundus**
 Felt, N. Y. St. Mus. Mem. 8, 635, 1906.
 Felt, N. Y. R. 25, 83, 1910.
 Garman, Ky. B. 120, 56, 1905.
 Jackson, Pr. Columbus Hort. Soc., 1907, 200.
 Morrison, Ind. Ent. R. 5, 208, 1912.
- Pemphigus venafuscus**
 Johannsen, Me. B. 177, 30, 1910.
 Johannsen, Me. B. 207, 448, 1912.
 Johannsen & Patch, Me. B. 195, 236, 1911.
 Patch, Ent. News, 1909, 319.
- Penciled snout-beetle**, *see* **Centrinus penicillus**
- Pentalonia nigrionervosa**
 Wilson, Jr. Ec. Ent. II, 346, 1909.
- Pentarthron minutum**
 Chittenden, U. S. C. 145, 8, 1912.
 Quayle, J. Ec. Ent. IV, 526, 1911.
 Webster, Ann. Ent. Soc. Am. IV, 184, 1911.
 Webster, Iowa B. 130, 187, 1912.
- Pentarthron retorridus**
 Webster, J. Ec. Ent. V, 335, 1912.
 Webster, J. Ec. Ent. IV, 181, 1911.
- Pentatoma juniperina**
 Felt, N. Y. R. 23, 112, 1913.
 Patch, Me. B. 134, 214, 1906.
- Pentatoma ligata**
 Gossard, Ohio B. 233, 147, 1911.
 Hinds, U. S. B. 59, 29, 1906.
 Howard, U. S. R. Ent., 1905, 280.
 Morrill, U. S. B. 54, 18, 1905.
 Morrill, U. S. B. 64, 1, 1907.
 Morrill, U. S. B. 86, 23, 1910.
 ——— U. S. Y. B., 1905, 631.
- Pentatoma sayi**
 Morrill, U. S. B. 54, 33, 1905.
 Morrill, U. S. B. 64, 2, 1907.
 Morrill, U. S. B. 86, 73, 1910.
- Morrill, S. W. Stockm., Sept. 12, '13, 10.
- Pentatoma uhleri**
 Forbes, Ill. Ent. R. 23, 116, 1905.
 Matheson, S. D. Hort. Soc. 5th R. 214, 1908.
- Penthe obliquata**
 Felt, N. Y. St. Mus. Mem. 8, 493, '06.
- Penthe pimelia**
 Felt, N. Y. St. Mus. Mem. 8, 493, '06.
- Pentilia misella**, *see* **Microweisla**
- Peranabrus scabricollis**
 Snodgrass, Jr. N. Y. Ent. Soc. XIII, 74, 1905.
 Yothers, The Ranch, July 1, 1914, 7.
- Peregrinus maidis**
 Forbes, Ill. Ent. R. 23, 120, 1905.
 Thomas, S. C. B. 174, 5, 1913.
 ——— U. S. Y. B., 1907, 543.
 ——— U. S. Y. B., 1908, 573.
- Peregrinus sp.**
 Forbes, Ill. Ent. R. 23, 204, 1905.
- Perfection Carman's Antipest**
 ——— U. S. D. A. Ins. & Fung. Bd. Ins. 3, p. 41, 1914.
- Peridroma margaritosa**
 Burgess & Collins, U. S. Y. B., 1911, 459.
 Chittenden, U. S. B. 66, 60, 1909.
 Chittenden, U. S. Y. B., 1912, 332.
 Cooley, Mont. R. 12, 267, 1906.
 Davis, Ill. Ent. R. 26, 107, 129, 1911.
 Davis, Ill. Ent. R. 27, 84, 1912.
 Metcalf, N. C. Dept. Agr. Sp. B., 41, 1909.
 ——— U. S. Y. B., 1907, 543, 545.
 ——— U. S. Y. B., 1908, 563, 573.
- Peridroma saucia**
 Bethune, Ont. Agr. Coll. R. 33, 54, 1908.
 Bethune, Ent. Soc. Ont. R. 38, 99, 1908.
 Chittenden, Ins. Inj. Veg., 53, 1907.
 Cook, Cal. Hort. B. I, 7, 271, 1912.
 Davis, J. Ec. Ent. III, 181, 182, 1910.
 Davis, Ill. Hort. Soc. f. 1910, 36, 1911.
 Dean, Kans. Agr. Educ. I, 4, 77, 1909.
 Essig, Cal. Hort. B. II, 1-2, 165, 1913.
 Forbes, Ill. Ent. R. 23, 23, 1905.
 Fulton, Wright & Gregg, Pa. B. 110, 20, 1911.
 Gibson, Ont. Ent. Soc. R. 39, 119, 1909.
 Gibson, Can. Exp. Farms Ent. B. 3, 17, 1912.
 Headlee, Kans. B. 155, 336, 1908.

Peridroma saucia (*Cont'd*)

Lovett, Oreg. Bien. Crop. Pest. R. f.
1913-1914, 141.

Morrill, J. Ec. Ent. VI, 192, 1913.

Newell, La. Hort. Soc., 1908, 52.

Pease, Cal. Cult., XXX, 414, 1908.

Sanborn, Okla. B. 100, 65, 1912.

Sanderson, U. S. B. 57, 10, 1906.

Sherman, N. C. Dept. Agr. B. 35, 5,
17, 1914.

Stedman, Mo. Bd. Agr. R. 38, 275, 1906.

Swenk, Nebr. Ent. B. 1, 35, 1913.

Treherne, Pr. Ent. Soc. B. C., 4, 30, '14.

Webster, J. Ec. Ent. V, 471, 1912.

——— U. S. Y. B., 1905, 629.

——— U. S. Y. B., 1906, 511.

Perilampus cuprinus

Howard & Fiske, U. S. B. 91, 209, 1911.

Perilampus hyalinus

Quaintance & Brues, U. S. B. 50, 122, '05.

Perilampus platygaster

Jones, U. S. B. 68, 87, 1909.

Perilampus sp.

Hewitt, Can. Exp. Farms Ent. B. 5, 33,
1912.

Perilampus sp. on boll weevil

Hunter & Pierce, U. S. B. 114, 141, '12.

Pierce, U. S. B. 100, 50, 1912.

Perilampus spp.

Smith, Tech. B. 19, pt. 4, U. S. Bur.
Ent., 1912.

Perilitus americanus

Cushman, Pr. Ent. Soc. Wash. XV, 153,
1913.

Folsom, Ill. B. 134, 146, 1909.

Perillus bioculatus

Bethune, Ont. Agr. Coll. R. 37, 29, '12.

Chittenden, U. S. B. 82, 85, 1911.

Marsh, U. S. B. 127, 17, 1913.

Perillus circumcinctus

Lochhead, Agr. Gaz. Can., Oct. 1914,
803.

Perillus claudus

Bethune, Ont. Agr. Coll. R. 37, 29, 1912.

Caesar, Ont. Ent. Soc. R. 42, 33, 1912.

Gibson, Ont. Ent. Soc. R. 42, 19, 1912.

Pettit, Mich. B. 251, 285, 1908.

Yothers, Can. Ent., 1911, 418.

Pettit, Mich. Farm., Aug. 15, 1914, 117.

Periodical cicada, see Tibicen septendecim**Periplaneta americana**

Felt, N. Y. St. Mus. B. 129, 32, 1909.

Felt, N. Y. St. Mus. B. 136, 37, 1912.

Herrick, Household Ins. 135, 1914.

Marlatt, U. S. C. 51, Rev., 1, 1908.

Morrill, S. W. Stockm., July 3, 1914, 10.

Rosenfeld, J. Ec. Ent. III, 100, 1910.

Smith, N. J. B. 203, 4, 1907.

Whitmarsh, Ohio B. 253, 124, 1912.

Periplaneta americana, disease of

Northrup, Mich. Tech. B. 18, 511, 1914.

Periplaneta australasiae

Felt, N. Y. St. Mus. B. 129, 33, 1909.

Felt, N. Y. St. Mus. B. 136, 38, 1912.

Herrick, Household Ins. 137, 1914.

Marlatt, U. S. C. 51, Rev., 8, 1908.

Skinner, Ent. News, 1905, 183.

Periplaneta orientalis, see Blatta**Perissopterus pulchellus**

Smith, Nebr. Hort. Soc. B. 20, 10, 1908.

Perkinsiella saccharicida

Holloway, U. S. C. 165, 4, 1912.

Pernicious scale, see Aspidiotus perniciosus**Peronea ferrugana**

Johannsen, Me. B. 207, 453, 1912.

Peronea minuta, see Accleris**Persian Insect Powder**

——— U. S. D. A. Ins. & Fung. No.
155, 1914.

Peterman's Ant Food

——— U. S. D. A. Ins. & Fung. No. 49,
1913.

Peterman's Roach Food

——— U. S. D. A. Ins. & Fung. Nos.
46, 47, 1913.

——— U. S. D. A. Ins. & Fung. No. 64,
1913.

Petroleum on dormant trees

Felt, N. Y. R. 28, 83, 1913.

Petroleum emulsion

Jarvis, Conn. Storrs B. 49, 5, 1907.

Penny, Del. B. 75, 1906.

Price, Pac. Rur. Press, LXXI, 69, 1906.

Smith, N. J. R., 1904, 644, 1905.

Van Buren & Husted, N. Y. Dept.
Agr. B. 24, 484, 1911.

Petroleum, see also oils**Petroleum, injuries by**

Felt, J. Ec. Ent. VI, 160, 1913.

Petroleum, Soluble

Worsham, Pr. Ga. Hort. Soc., 1908, 74.

Phaedon aeruginosa

Chittenden, Ins. Inj. Veg. 147, 1907.

Chittenden, U. S. B. 66, 16, 1907.

- Chittenden, U. S. B. 66, 96, 1909.
- Phaenococcoccus marlatti**
 ——— U. S. Y. B., 1907, 548.
- Phalacrus politus**
 Forbes, Ill. Ent. R. 23, 180, 1905.
- Phalonia rutilana**
 Britton, Conn. R. 12, 295, 1913.
- Phanerotoma recurvariae**
 Scott & Paine, U. S. D. A. B. 113, 11, 1914.
- Phanerotoma sp.**
 Foster & Jones, U. S. B. 80, 50, 1909.
- Phanerotoma tibialis**
 Franklin & Morse, Mass. B. 150, 55, '14.
- Phanurus tabanivorus**
 Hine, La. Crop Pest Comm. C. 6, 27, 1906.
 Hine, La. B. 93, 11, 1907.
 Washburn, Minn. P. B. 22, 11, 1905.
- Pharaxonotha kirschi**
 Chittenden, U. S. B. 96, 8, 1911.
- Phasgonophora sulcata**
 Slingerland, N. Y. C. B. 243, 1906, 76.
- Pheasants and insects**
 Olin, Iowa Home., May 19, 1910, 1069.
- Pheidole crassicornis**
 Hunter & Pierce, U. S. B. 114, 140, 1912.
 Pierce, U. S. B. 100, 72, 1912.
- Pheidole dentata comutata**
 Vickery, U. S. B. 85, 102, 1910.
- Pheidole sp. on boll weevil**
 Hunter & Pierce, U. S. B. 114, 140, '12.
 Pierce, U. S. B. 100, 71, 1912.
- Pheidole vinelandica**
 Vickery, U. S. B. 85, 102, 105, 116, '10.
- Phellopsis obcordata**
 Felt, N. Y. St. Mus. Mem. 8, 406, '06.
- Phenacoccus acericola**
 Britton, Conn. B. 151, 5, 1905.
 Britton, Conn. R. 226, 236, 1906.
 Britton, Conn. J. Ec. Ent. III, 436, '10.
 Britton, U. S. B. 60, 161, 1906.
 Britton, Conn. R. 11, 345, 1912.
 Douglass, Ind. Ent. R. 4, 154, 1912.
 Ehrhorn, Pac. Rur. Press, LXXVI, 372, 1908.
 Ehrhorn, Cal. Fr. Grow., Dec. 12, 1908, 11.
 Felt, N. Y. St. Mus. Mem. 8, 183, '05.
 Felt, N. Y. R. 21, 97, 1906.
 Felt, U. S. B. 60, 90, 1906.
 Felt, N. Y. R. 22, 57, 1907.
 Felt, U. S. B. 67, 41, 1907.
- Felt, N. Y. R. 25, 100, 1910.
 Felt, N. Y. R. 26, 55, 1911.
 Felt, N. Y. R. 27, 88, 1912.
 Gibson, Ont. Ent. Soc. R. 41, 14, '11.
 Johannsen, Me. B. 207, 442, 1912.
 Smith, N. J. R. f. 1904, 559, 1905.
 Smith, N. J. B., 181, 26, 1905.
 Smith, N. J. R., '06, 565, 567, 569.
 Smith, N. J. R., 1909, 371.
 Smith, N. J. R., 1910, 346.
 Smith, N. J. R., 1911, 423.
 Stene, R. I. Bd. Agr. R. 23, 32, 1908.
 Weiss, N. J. R., 1912, 428.
 ——— U. S. Y. B., 1905, 635.
 ——— U. S. Y. B., 1906, 514.
- Phenacoccus artemisiae**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 173, 1907.
- Phenacoccus dearnessi**
 Johannsen, Me. B. 207, 443, 1912.
- Phenacoccus marlatti**, *see* **Phoenicococcus**
- Phenacoccus sp.**
 Johannsen, Me. B. 187, 10, 1911.
- Phenacoccus stachyos**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 173, 1907.
- Phengodes plumosa**
 Felt, C. Gentl., 1909, 907.
 Felt, N. Y. R. 25, 95, 1910.
- Phenol**
 Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 23, 1907.
- Phenol-camphor**
 Goldberger, Pub. Health R. XXIII, 1012, 1908.
 Rosenau, Prevent. Med., 193, 1913.
- Pheno-Chloro**
 ——— U. S. D. A. Ins. & Fung. No. 66, 1913.
- Phenol Sodique**
 ——— U. S. D. A. Ins. & Fung. No. 67, 1913.
- Phenolia grossa**
 Felt, N. Y. St. Mus. Mem. 8, 496, 1906.
- Phidippus coloradensis**
 Marsh, U. S. B. 127, 18, 1913.
- Phigalia titea**
 Slingerland & Crosby, Man. Fr. Ins. 96, 1914.
- **Philaenus lineatus**
 Felt, N. Y. R. 21, 94, 1906.

- Felt, U. S. B. 60, 90, 1906.
- Philaenus spumarius**
 Davis, J. Ec. Ent. III, 184, 1910.
 Felt, N. Y. R. 21, 94, 1906.
 Felt, U. S. B. 60, 90, 1906.
- Philampelus achemon**, *see* **Pholus**
- Philonthus apicalis**
 Chittenden, U. S. C. 87, 11, 1907.
- Philonthus brunneus**
 Brooks, W. Va. R. f. 1904-1905, 22.
 Brooks, W. Va. B. 100, 240, 1906.
- Philosamia cynthia**
 Douglass, Ind. Ent. R. 2, 45, 1910.
- Phinotas oil**
 Grossbeck, N. J. R., 1907, 554.
- Phlegethontius celeus**, *see* **P. quinquemaculata**
- Phlegethontius quinquemaculata**
 Barre & Conradi, S. C. B. 141, 50, 1909.
 Bethune, Ont. Agr. Coll. B. 171, 35, '09.
 Britton, Conn. R. 6, 269, 1907.
 Britton, J. Ec. Ent. III, 434, 1910.
 Chandler, Mo. B. 102, 267, 1912.
 Chittenden, Ins. Inj. Veg., 229, 1907.
 Douglass, Ind. Ent. R. 2, 43, 1910.
 Essig, Cal. Hort. B. II, 1-2, 157, 1913.
 Fletcher, Can. Exp. Farms B. 52, 40, '05.
 Garcia, N. Mex. B. 68, 27, 1908.
 Gossard, Ohio B. 233, 83, 1911.
 Green, Tex. B. 94, 17, 1907.
 Hooker, U. S. B. 67, 108, 1907.
 Lovett, Oreg. Bien. Crop Pest R. f. 1913-1914, 170.
 Metcalf, N. C. Dept. Agr. Sp. B. 24, '09.
 Morgan, U. S. Y. B., 1910, 284.
 Morgan, U. S. C. 123, 6, 1910.
 Morgan, Tenn. B. 93, 106, 1911.
 Morgan & Parman, Fla. Grow., July, 26, 1913, 8.
 Morgan & Parman, U. S. F. B. 595, 1, 1914.
 Morrill, S. W. Stockm., June 26, '14, 10.
 O'Kane, Inj. Ins. 168, 1914.
 Price, Va. C. 7, 67, 74, 1909.
 Sanders, Col. Rur. World, Aug. 24, 1910, 266.
 Sanders, Am. Agric., Sept. 3, 1910, 202.
 Sanders, Or. Judd Farm., Sept. 3, 1910, 232.
 Sanderson, Ins. Pests, 228, 1912.
 Smith, N. C. B. 197, 59, 1908.
- Symons, Md. B. 101, 171, 1905.
 Watson, Fla. B. 112, 30, 1912.
 Watson, Fla. B. 125, 1914, 68.
 ——— U. S. Y. B., 1907, 542, 545.
 ——— U. S. Y. B., 1908, 568, 572.
- Phlegethontius sexta**
 Baldwin, Ind. Ent. R. 5, 134, 1912.
 Barnes, Amer. Cult., June 28, 1913, 4.
 Britton, Conn. R. 6, 269, 1907.
 Britton, J. Ec. Ent. III, 434, 1910.
 Chittenden, Ins. Inj. Veg. 232, '07.
 Conradi, Tex. B. 89, 41, 1907.
 Douglass, Ind. Ent. R. 2, 40, 1910.
 Ehrhorn, Cal. Hort Comm. Bien. R. 2, 227, 1907.
 Essig, Cal. Hort. B. II, 1-2, 156, 1913.
 Garcia, N. Mex. B. 68, 27, 1908.
 Gossard, Ohio B. 233, 83, 1911.
 Hooker, U. S. B. 67, 108, 1907.
 Jenkins, Conn. B. 180, 41, 1914.
 Johnson, Wis. B. 237, 29, 1914.
 Lovett, Oreg. Bien. Crop Pest R. f. 1913-1914, 170.
 Mason, South. Plant., May 1911, 569.
 Metcalf, N. C. Dept. Agr. Sp. B. 24, '09.
 Morgan, U. S. C. 123, 6, 1910.
 Morgan, U. S. Y. B., 1910, 284.
 Morgan, Tenn. B. 93, 106, 1911.
 Morgan, U. S. C. 173, 1, 1913.
 O'Kane, Inj. Ins. 168, 1914.
 Pettit, Mich. B. 233, 214, 1906.
 Sanborn, Okla. B. 100, 54, 1912.
 Smith, N. J. R., 1908, 328.
 Stuckey, South. Cult., July 15, 1912, 25.
 Symons, Md. B. 101, 171, 1905.
 Watson, Fla. B. 125, 1914, 69.
 Webster, J. Ec. Ent. V, 471, 1912.
 ——— U. S. Y. B., 1907, 545.
 ——— U. S. Y. B., 1908, 568, 572.
- Phlegethontius spp.**
 Lewis, Pr. Ga. Hort. f. 1912, 11.
 Weed, Nat'l Stockm., & Farm., Apr. 12, 1913, 14.
- Phleothrips niger**
 Pettit, Mich. B. 258, 286, 1910.
- Phlepsius irroratus**
 Forbes, Ill. Ent. R. 23, 205, 1905.
 Osborn, U. S. B. 108, 94, 1912.
- Phloeophthorus**, *see* **Phloeotribus**
- Phloeosinus dentatus**
 Britton, Conn. R. 10, 708, 1911.
 Felt, N. Y. St. Mus. Mem. 8, 391, 1906.

Phloeotribus liminaris

- Alderman, Giddings & Rumsey, W. Va. C. 7, 35, 1913.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 76, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 452, 1906.
 Gossard, Ohio B. 198, 62, 1908.
 Gossard, Ohio P. B. 301, 1908.
 Gossard, Farm. Guide, Apr. 24, '09, 3.
 Gossard, Ohio Hort. Soc., 1909, 81.
 Gossard, Ohio B. 233, 125, 1911.
 Gossard, Ohio B. 264, 31, 1913.
 Gossard, Ohio C. 140, 8, 1914.
 O'Kane, Inj. Ins. 242, 1914.
 Quaintance, Pr. Ent. Soc. Wash. X, 122, 1909.
 Sanderson, Ins. Pests, 653, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 282, 1914.
 Swaine, Ont. Ent. Soc. R. 40, 58, 1910.
 Swaine, Ont. Ent. Soc. R. 41, 92, 1911.
 Twigg, Kans. Hort. Soc., 1911, 320.
 Wilson, Ohio C. 89, 4, 1909.
 Wilson, U. S. B. 68, 91, 1909.
 ——— Va. Agr. R. f. 1909, 77, 1909.

Phloeotrya liturata

- Felt, N. Y. St. Mus. Mem. 8, 493, 1906.

Phlyctaenia ferrugalis

- Bethune, Ont. Agr. Coll. B. 171, 22, '09.
 Britton, Conn. R. 9, 369, 1910.
 Chittenden, Ins. Inj. Veg., 180, 1907.
 Chittenden, Florists' Rev., Mar. 19, 1908, 10.
 Davis, J. Ec. Ent. III, 182, 1910.
 Davis, Ill. Ent. R. 27, 98, 1912.
 Davis, Ill. Hort. Soc. f. 1910, 39, 1911.
 Gibson, Ont. Ent. Soc. R. 41, 15, 1911.
 O'Kane, Inj. Ins. 186, 1914.
 Pettit, Mich. B. 233, 178, 1906.
 Quayle, Cal. Cult., XXXV, 371, 1910.
 Rogers, Cal. B. 208, 114, 1911.
 ——— U. S. Y. B., 1906, 516.
 ——— U. S. Y. B., 1907, 544.
 ——— U. S. Y. B., 1908, 573.

Phlyctaenia rubigalis

- Felt, N. Y. R. 26, 49, 1911.
 Gibson, Ont. Ent. Soc. R. 36, 121, 1906.
 Pettit, Mich. B. 244, 209, 1907.
 Sanderson, Ins. Pests, 409, 1912.

Phobetres albinopenis

- Haseman, Mo. B. 104, 324, 1912.

Phobetron pithecium

- Felt, N. Y. St. Mus. Mem. 8, 528, 1906.
 Garman, Ky. B. 133, 46, 1908.
 Herrick, Household Ins. 431, 1914.
 Johannsen & Patch, Me. B. 195, 241, 1911.

Phoenicococcus marlatti

- Cockerell, Ariz. B. 56, 191, 1907.
 Cook, Cal. Hort. B. III, 10, 440, 1914.
 Essig, Cal. Hort. B. II, 1-2, 94, 1913.
 Forbes, Ariz. B. 56, 193, 1907.
 Forbes, J. Ec. Ent. VI, 415, 1913.
 Forbes, S. W. Stockm., Mar. 20, '14, 11.
 Wilsie, Cal. Hort. B. II, 5, 538, 1913.
 ——— U. S. Fed. Hort. Bd. Quar. Not. 6, 1913.

Pholus achemon

- Baldwin, Ind. Ent. R. 5, 118, 1912.
 Douglass, Ind. Ent. R. 3, 195, 1910.
 Essig, Cal. Hort. B. II, 1-2, 158, 1913.
 Gillette, Colo. B. 114, 22, 1906.
 Gillette, Better Fr., Feb. 1910, 21.
 Gossard, Ohio B. 233, 138, 1911.
 O'Kane, Inj. Ins. 273, 1914.

Pholus pandorus

- Gossard, Ohio B. 233, 138, 1911.
 Johannsen & Patch, Me. B. 195, 241, 1911.

Pholus sp.

- Douglass, Ind. Ent. R. 2, 45, 1910.
 Sanderson, Ins. Pests, 527, 1912.

Phora incisuralis

- Quaintance & Brues, U. S. B. 50, 126, 1905.

Phora sp.

- Smith, N. J. R., 1908, 339.

Phorbia brassicae, see Pegomyia

Phorbia ceparum, see P. cepetorum

Phorbia cepetorum

- Ames, N. Eng. Farm., July 17, 1909, 9.
 Baldwin, Ind. Ent. R. 5, 146, 1912.
 Barre & Conradi, S. C. B., 141, 40, 1909.
 Beattie, U. S. F. B., 354, 35, 1909.
 Beattie, U. S. F. B., 434, 23, 1911.
 Bethune, Ont. Agr. Coll. B. 171, 27, '09.
 Britton, Conn. R. 4, 214, 1905.
 Brues, Wis. R. 22, 326, 1905.
 Caesar, Ont. Ent. Soc. R. 42, 32, 1912.
 Caffrey, Amer. Cult., Apr. 20, 1912, 1.
 Caffrey, Conn. R. 11, 286, 1912.
 Chittenden, U. S. C. 63, 6, 1905.
 Chittenden, U. S. C. 63, 2nd Ed., 6, '06.

Phorbia cepetorum (*Cont'd*)

- Chittenden, Ins. Inj. Veg., 245, 1907.
 Chittenden, U. S. B. 66, 94, 1909.
 Chittenden, U. S. Y. B., 1912, 327.
 Conradi, Tex. B. 89, 32, 1907.
 Cooley, Mont. B. 79, 53, 1910.
 Cooley, Mont. B. 98, 127, 1914.
 Davis, J. Ec. Ent. III, 181, 1910.
 Davis, Ill. Ent. R. 26, 133, 1911.
 Fernald, Mass. C. 5, 1907.
 Fernald & Bourne, Mass. R. 25, I, 171, 1913.
 Fletcher, Can. Exp. Farms. B. 52, 34, 1905.
 Fletcher, Farm. Advocate, Can., '11, 676.
 Gossard, O. Farm., July 22, 1911, 59.
 Gossard, O. Farm., Apr. 12, 1913, 531.
 Jarvis, Ont. Ent. Soc. R. 37, 49, 1907.
 Lewis, Pr. Ga. Hort. Soc. f. 1912, 12.
 Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 19, 1906.
 Lovett, Oreg. Coll. B. 91, 27, 1913.
 McMeans, Ont. Agr. Coll. B. 199, 22, 1912.
 Morse, Mich. Farm. Oct. 13, 1906, 284.
 Newell, Farm & Ranch, Dec. 5, 1914, 9.
 O'Kane, Inj. Ins. 120, 1914.
 Osborn & Parrott, Am. Agric., Mar. 27, 1909, 417.
 Pelton, Rur. N. Y., 1911, 430.
 Pettit, Mich. Farm., Mar. 4, 1905, 204.
 Pettit, Mich. B. 233, 186, 1906.
 Price, Va. C. 7, 62, 1909.
 Russell, Wis. B. 240, 44, 1914.
 Sanborn, Okla. B. 100, 39, 1912.
 Sanderson, Ins. Pests, 420, 1912.
 Severin, Can. Ent., 1914, 312.
 Smith, N. J. R., 1905, 579.
 Smith, N. J. R., 1906, 549.
 Smith, N. J. B. 200, 10, 1907.
 Smith, N. J. R., 1908, 355.
 Smith, N. C. B. 197, 47, 1908.
 Treherne, Pr. Ent. Soc. B. C., 4, 30, '14.
 Washburn, Minn. R. 11, 20, 1906.
 Watts, Nat'l Stockm. & Farm., July 12, 1913, 10.
 ——— C. Gentl., 1910, 642.
 ——— Farm. Advocate, Can., '11, 1022.
 ——— U. S. Y. B., 1905, 620.
 ——— U. S. Y. B., 1906, 511.
 ——— U. S. Y. B., 1907, 546.

——— U. S. Y. B., 1908, 572.

Phorbia cinerella

Johannsen, Me. B. 187, 6, 1911.

Phorbia fusciceps, *see* **Pegomyia****Phorbia rubivora**

O'Kane, Inj. Ins. 245, 1914.

Sanderson, Ins. Pests, 469, 1912.

Slingerland & Crosby, Man. Fr. Ins. 329, 1914.

Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 136.

Phorbia spp.

Bethune, Ont. Agr. Coll. R. 32, 48, '07.

Lochhead, Syn. Ec. Ent. 93, 1914.

Phormia regina

Felt, N. Y. R. 28, 75, 1913.

Johannsen, Me. B. 187, 6, 1911.

Phormia terraenovae

Howard, U. S. C. 71, 2, 1906.

Howard, U. S. F. B. 459, 6, 1911.

Phorocera claripennis, *see* **Euphorocera****Phorocera comstocki**

Hunter, Pratt & Mitchell, U. S. B. 113, 27, 1912.

Phorocera erecta

Chittenden, U. S. B. 109, 21, 1911.

Phorocera leucaniae

Garman, Ky. B. 137, 436, 1908.

Howard & Fiske, U. S. B. 91, 145, 1911.

Tothill, Ont. Ent. Soc. R. 43, 58, 1913.

Phorocera saundersii

Howard & Fiske, U. S. B. 91, 145, 1911.

Hyslop, U. S. B. 95, 117, 1912.

Phorocera tortricis

Herrick, N. Y. C. B. 311, 291, 1912.

Phorodon humuli

Bremner, Cal. Hort. Comm. Destr. Ins. 24, 1910.

Clarke, Oreg. Bd. Hort. 8th Bien, R. 285, 1905.

Cooper, Cal. Hort. Comm. Ins. & Insect., 1905, 11.

Essig, Cal. Hort. B. II, 1-2, 84, 1913.

Felt, N. Y. R. 25, 77, 1910.

Gillette & Taylor, Colo. B. 133, 40, '08.

Gillette & Taylor, Colo. B. 134, 14, '08.

Gillette & Taylor, Better Fr., Apr., 1909, 19.

Gossard, Ohio B. 233, 122, 1911.

Menges, Pa. Dept. Agr. 19, 355, 1913.

O'Kane, Inj. Ins. 203, 321, 1914.

Parker, U. S. B. 111, 9, 1913.

- Pettit, Mich. B. 233, 184, 1906.
 Sanderson, Ins. Pests, 275, 664, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 256, 1914.
 Symons, Md. B. 101, 151, 1905.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 89.
- Photoris pennsylvanica**
 Brooks, W. Va. B. 107, 28, 1907.
- Phoxopteris comptana**, *see* *Ancylys*
Phoxopteris fragariae
 Gossard, Ohio B. 233, 148, 1911.
Phoxopteris nubeculana, *see* *Ancylys*
Phryganidia californica
 Doane, J. Ec. Ent. V, 346, 1912.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 227, 1907.
 Smith, Cal. Hort. B. II, 7, 590, 1913.
 Woodworth, Cal. C. 18, 1906.
 ——— Pac. Rur. Press, LXXXIV, 371, 1912.
- Phthirus inguinalis**
 Dietz, Ind. Ent. R. 5, 188, 1912.
 Herrick, Household Ins. 314, 1914.
 Smith, N. J. B. 203, 26, 1907.
 Surface, Pa. D. A. Zool. III, 1, 28, '13.
 Whitmarsh, Ohio B. 253, 131, 1912.
- Phthorimaea operculella**
 Chittenden, Ins. Inj. Veg., 224, 1907.
 Chittenden, U. S. C. 162, 1, 1912.
 Chittenden, U. S. F. B. 557, 1913.
 Chittenden, S. W. Stockm., Jan. 9, 1914, 10.
 Essig, Cal. Cult., XXXIX, 195, 1912.
 Essig, Cal. Hort. B. I, 6, 203, 1912.
 Essig, Cal. Hort. B. II, 9, 665, 1913.
 Essig, Cal. Hort. B. II, 1-2, 166, 1913.
 Hooker, U. S. B. 67, 110, 1907.
 Howard, U. S. R. Ent. 1913, 9.
 Lovett, Oreg. Coll. B. 91, 13, 1913.
 Metcalf, N. C. Dept. Agr. Sp. B., 53, '09.
 Morgan, U. S. Y. B., 1910, 289.
 Morgan & Crumb, U. S. D. A. B. 59, 1 1914.
 O'Kane, Inj. Ins. 117, 189, 1914.
 Sanderson, Ins. Pests, 237, 289, 1912.
 Volck, Cal. Hort. B. III, 10, 409, 1914.
 Yothers, Pac. Rur. Press, LXXXVI, 296, 1913.
 ——— Pac. Rur. Press, LXXXIII, 3, 1912.
 ——— U. S. Y. B., 1906, 509.
- U. S. Y. B., 1907, 545.
 ——— U. S. Y. B., 1908, 569, 572.
- Phthorimaea operculella**—*Quarantine*
 Cook, S. W. Stockm., Apr. 3, 1914, 10.
- Phycis indiginella**, *see* *Mineola*
- Phygadeuon brevis**
 Quaintance, U. S. Y. B., 1907, 443.
- Phygadeuon neodiprioni**
 Swenk, Nebr. R. 24, 29, 1911.
- Phygadeuon n. sp. on Diprion**
 Swenk, Nebr. R. 24, 29, 1911.
- Phygadeuon patulus**
 Swenk, Nebr. R. 24, 29, 1911.
- Phygadeuon sp. on alfalfa weevil**
 Webster, U. S. B. 112, 38, 1912.
- Phylethus bifasciatus**
 Swenk, Nebr. Ent. B. 1, 104, 1913.
- Phyllaphis fagi**
 Felt, N. Y. St. Mus. Mem. 8, 601, 1906.
 Felt, J. Ec. Ent. II, 307, 1909.
 Felt, N. Y. R. 25, 80, 1910.
- Phyllobaenus dislocatus**
 Felt, N. Y. St. Mus. Mem. 8, 503, 1906.
- Phyllocnistis citrella**
 Marlatt, U. S. Fed. Hort. Bd. R. 8, '14.
- Phyllocnistis vitigenella**
 Stewart, N. Y. St. B. 328, 351, 1910.
- Phyllocoptes aceris-crumena**
 Parrott, J. Ec. Ent. I, 312, 1908.
- Phyllocoptes schlechtendali**
 Brittain, Pr. Ent. Soc. B. C., 4, 18, 1914.
 Parrott, Hodgkiss & Schoene, N. Y. St. B. 283, 314, 1906.
- Phyllocoptes sp.**
 Moore, Wis. B. 190, 24, 1910.
- Phyllonorycter crataegella** *see* *Lithocolletis*
- Phylloscelis atra**
 — Jordan, N. Y., St. B. 393, 650, 1914.
 Sirrine & Fulton, N. Y. St. B. 377, 91, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 472, 1914.
- Phyllotreta armoraciae**
 Davis, J. Ec. Ent. III, 181, 1910.
 Gibson, Can. Exp. Farms Ent. C. 2, 10, 1913.
 Gibson, Ont. Ent. Soc. R. 43, 13, 1913.
 Winn, Ont. Ent. Soc. R. 41, 59, 1911.
 ——— U. S. Y. B., 1908, 572.
- Phyllotreta pusilla**
 Chittenden, Ins. Inj. Veg., 147, 1907.

- Cooley, Mont. R. 12, 260, 1906.
 Forbes, Ill. Ent. R. 23, 109, 1905.
 O'Kane, Inj. Ins. 159, 1914.
 Sanderson, Ins. Pests, 375, 1912.
 ——— U. S. Y. B., 1908, 572.
- Phyllotreta sinuata**
 Duporte, Can. Ent., 1914, 433.
 Sanderson, Ins. Pests, 375, 1912.
- Phyllotreta vittata**
 Bethune, Ont. Agr. Coll. B. 171, 36, '09.
 Chittenden, Ins. Inj. Veg., 146, 1907.
 Davis, Ill. Ent. R. 26, 113, 1911.
 Fletcher, Can. Exp. Farms B. 52, 42, '05.
 Fletcher, Ont. Ent. Soc. R. 36, 86, 1906.
 Gibson, Ont. Ent. Soc. R. 39, 116, 1909.
 Gibson, Ont. Ent. Soc. R. 41, 12, 1911.
 Gibson, Can. Exp. Farms Ent. C. 2, 9, 1913.
 Gibson, Ont. Ent. Soc. R. 43, 13, 1913.
 Lochhead, Syn. Ec. Ent. 76, 1914.
 Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 31, 1906.
 O'Kane, Inj. Ins. 158, 1914.
 Patch, Me. B. 123, 217, 1905.
 Pettit, Mich. B. 233, 172, 1906.
 Sanborn, Okla. B. 100, 56, 1912.
 Sanderson, Ins. Pests, 375, 1912.
 Schoene, N. Y. St. B. 334, 15, 1911.
 Smith, N. C. R. 33, 32, 1910.
 ——— U. S. Y. B., 1906, 511.
 ——— U. S. Y. B., 1908, 571.
- Phylloxera caryaecaulis**
 Felt, N. Y. St. Mus. Mem. 8, 331, 1905.
 Felt, N. Y. R. 21, 99, 1906.
 Felt, N. Y. R. 25, 82, 1910.
 Herrick & Harned, J. Ec. Ent. II, 295, 1909.
 Tucker, La. Crop Pest Notice 2, 1914.
 Weiss, N. J. R., 1912, 428.
 ——— U. S. Y. B., 1908, 579.
- Phylloxera foveola**
 Felt, N. Y. St. Mus. Mem. 8, 629, '06.
- Phylloxera notabilis**
 Chittenden, Nut Grow., Sept. 1905, 19.
 Chittenden, Nut Grow., May 1909, 4.
 ——— U. S. Y. B., 1905, 636.
 ——— U. S. Y. B., 1907, 549.
 ——— U. S. Y. B., 1908, 579.
- Phylloxera perniciosa**
 Chittenden, Nut Grow., May '09, 4.
 Tucker, La. Crop Pest Notice 2, 1914.
 ——— U. S. Y. B., 1908, 579.
- Phylloxera vastatrix**
 Aldrich, Idaho B. 46, 3, 1905.
 Barre & Conradi, S. C. B. 141, 36, 1909.
 Bethune, Ont. Agr. Coll. B. 158, 32, '07.
 Bioletti, Cal. Cult., XXV, 508, 1905.
 Bremner, Cal. Hort. Comm. Bien. R. 1, 338, 1905.
 Bremner, Cal. Hort. Comm. Destr. Ins., 1910, 27.
 Cook, N. J. C. 34, 8.
 Cook, N. J. C. 35, 7.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 88, 1913.
 Douglass, Ind. Ent. R. 3, 200, 1910.
 Dwinelle, Pac. Rur. Press, LXX, 308, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 110, 1905.
 Essig, Cal. Hort. B. II, 1-2, 47, 1913.
 Gossard, Ohio B. 233, 133, 1911.
 Howard, U. S. R. Ent., 1912, 24.
 Lochhead, Syn. Ec. Ent. 46, 1914.
 Morrill, J. Ec. Ent. VI, 190, 1913.
 O'Kane, Inj. Ins. 227, 1914.
 Sanderson, Ins. Pests, 493, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 455, 1914.
 Surface, Pa. D. A. Zoöl. I, 1, 35, 1911.
 Symons, Md. B. 101, 152, 1905.
 Tucker, La. Crop Pest Notice 2, 1914.
 Washburn, Minn. R. 12, 141, 1908.
 ——— Pac. Rur. Press, LXX, 259, 1905.
- Phylloxera vastatrix—Quarantine**
 Cal. Hort. B. I, 13, 952, 1912.
- Phylloxera vitifoliae**, *see* *P. vastatrix*
- Phymatodes dimidiatus**
 Felt, N. Y. St. Mus. Mem. 8, 669, '06.
- Phymatodes variabilis**
 Felt, N. Y. St. Mus. Mem. 8, 433, '06.
- Physcus sp. on grape scale**
 Zimmer, U. S. B. 97, 119, 1912.
- Physcus varicornis**
 Marlatt, U. S. B. 62, 60, 1906.
 Quaintance, U. S. C. 124, 10, 1910.
 Smith, Nebr. Hort. Soc. B. 20, 10, 1908.
 Surface, Pa. D. A. Zoöl. V, 2, 58, 1907.
 Zimmer, U. S. B. 97, 119, 1912.
- Physocnemus brevilineum**
 Felt, N. Y. St. Mus. Mem. 8, 462, 1906.
- Physokermes insignicola**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 195, 1907.

- Physostegania pustularia**
Hardenberg, Wis. B. 159, 18, 1908.
- Phytocoris eximius**
Felt, N. Y. St. Mus. Mem. 8, 685, 1906.
- Phytodecta pallida**
Felt, N. Y. St. Mus. Mem. 8, 558, 1906.
- Phytodietus vulgaris**
Herrick, N. Y. C. B. 311, 286, 1912.
- Phytomyza chrysanthemi**
Britton, Conn. R. 11, 342, 1912.
Fernald, Mass. R. 23, I, 78, 1911.
Fernald, Mass. R. 26, I, 55a, 1914.
Sanders, J. Ec. Ent. V, 472, 1912.
Smulyan, Mass. B. 157, 21, 1914.
Treherne, Pr. Ent. Soc. B. C., 4, 30, '14.
- Phytomyza lateralis**
Cooley, Mont. B. 92, 60, 1912.
- Phytonomus meles**
Felt, N. Y. R. 27, 98, 1912.
Felt, J. Ec. Ent. VI, 283, 1913.
Smith, N. J. R. 426, 1911.
Titus, Ann. Ent. Soc. Am. IV, 435, '11.
Titus, Psyche, 1911, 74.
- Phytonomus murinus**, *see* **P. posticus**
- Phytonomus nigrirostris**
Fletcher, Can. Exp. Farms B. 52, 29, '05.
Fletcher, Ont. Ent. Soc. R. 36, 84, 1906.
Gibson, Ont. Ent. Soc. R. 41, 12, 1911.
Houghton, J. Ec. Ent. I, 297, 1908.
O'Kane, Inj. Ins. 166, 1914.
Titus, Ann. Ent. Soc. Am. IV, 442, '11.
Webster, U. S. B. 85, 1, 1911.
——— U. S. Y. B., 1908, 569.
- Phytonomus posticus**
Ball, Deseret Farm., May 21, 1910, 3.
Ball, S. W. Stockm., Aug. 12, 1910, 1.
Ball, Deseret Farm., Mar. 25, 1911, 7.
Cook, Pom. Jr. Ent. III, 576, 1911.
Cook, Cal. Hort. B. I, 1, 19, 1911.
Cook, Cal. Cult., XXXIX, 224, 1912.
Cook, Cal. Cult., XLII, 633, 1914.
Cooley, Mont. B. 88, 88, 1912.
Cooley, Mont. B. 92, 61, 1912.
Cooley, Mont. C. 35, 191, 1914.
Dean, Kans. Farm., Mar. 22, 1913, 6.
Doten, Nev. B. 73½, 45, 1910.
Doten, Nev. R. f. 1911, 36.
Doten, Nev. R. f. 1912, 37.
Gillette, S. W. Stockm., Aug. 26, '10, 1.
Howard, U. S. R. Ent., 1910, 27.
Howard, U. S. R. Ent., 1911, 25.
Howard, U. S. R. Ent., 1912, 11, 27.
- Howard, U. S. R. Ent., 1913, 6.
Howard, U. S. R. Ent., 1914, 9.
Kalmbach, U. S. D. A. B. 107, 1, 1914.
Jardine & Call. Kans. B. 197, 608, 1914.
Merrill, Cal. Hort. B. I, 10, 765, 1912.
Morrill, S. W. Stockm., Mar. 17, '11, 1.
Morrill, S. W. Stockm., June 6, '13, 10.
O'Kane, Inj. Ins. 162, 1914.
Parks, Idaho Exten. B. 7, 3, 1913.
Parks, J. Ec. Ent., VII, 417, 1914.
Sanderson, Ins. Pests, 205, 1912.
Titus, Deseret Farm., Sept. 26, 1908, 3.
Titus, Deseret Farm., Oct. 3, 1908, 11.
Titus, Deseret Farm., July 10, 1909, 10.
Titus, J. Ec. Ent. II, 149, 1909.
Titus, J. Ec. Ent. III, 459, 1910.
Titus, Utah B. 110, 19, 1910.
Titus, Ann. Ent. Soc. Am. IV, 452, 1911.
Titus, Deseret Farm., May 18, 1912, 762.
Titus, Utah Farm., Sept. 21, 1912, 136.
Titus, Utah C. 10, 1913.
Titus, Utah Farm., Apr. 26, 1913, 631.
Titus, Utah Farm., Feb. 14, 1914, 466.
Webb, Utah Farm., Aug. 3, 1912, 938.
Webb, Utah Farm., Aug. 23, 1913, 61.
Webster, Cal. Cult., XXXVII, 75, 1911.
Webster, S. W. Stockm., Apr. 28, '11, 1.
Webster, C. Gentl., Dec. 28, 1912, 7.
Webster, U. S. B. 112, 9, 1912.
Westgate, McKee & Evans, U. S. F. B. 495, 31, 1912.
——— Cal. Hort. Comm. Bien. R. 6, 12, 1914.
——— Deseret Farm., Apr. 13, '12, 687.
——— S. W. Stockm., May 28, 1909, 11.
——— S. W. Stockm., Mar. 1, 1912, 10.
——— U. S. Y. B., 1908, 569.
- Phytonomus posticus—Quarantine**
Cook, Cal. Hort. B. I, 10, 796, 1912.
Cook, Cal. Hort. Comm. Bien. R. 5, 13, 1912.
Morrill, Cal. Hort. B. I, 13, 952, 1912.
Parks, Idaho Ext. B. 7, 20, 1913.
——— Cal. Hort. B. I, 12, 924, 1912.
- Phytonomus punctatus**
Britton, Conn. R. 13, 255, 1914.
Fletcher, Can. Exp. Farms B. 52, 28, 1905.
Fletcher, Ont. Ent. Soc. R. 36, 84, 1906.
Folsom, Ill. B. 134, 155, 1909.
Folsom, Ill. Ent. R. 25, 83, 1909.
Garman, Ky. B. 125, 48, 1906.

- Gossard, Ohio B. 198, 38, 1908.
 Gossard, Ohio B. 233, 78, 1911.
 Haseman, Mo. P. B. 38, 1914.
 Lochhead, Syn. Ec. Ent. 81, 1914.
 O'Kane, Inj. Ins. 164, 1914.
 Pettit, Mich. B. 258, 282, 1910.
 Sanderson, Ins. Pests, 203, 1912.
 Smith, N. J. R., 1910, 351.
 Surface, Pa. D. A. Zoöl. II, 5, 186, 1912.
 Surface, Pa. D. A. Zoöl. I, 1, 25, 1911.
 Titus, Ann. Ent. Soc. Am. IV, 396, '11.
 Troop, Farm. Guide, May 27, 1911, 13.
 Troop, Farm. Guide, May 16, 1914, 20.
 Troop, Ind. R. 27, 49, 1914.
 Webster, U. S. C. 69, 1, 1906.
 Webster, U. S. Y. B., 1907, 250.
 Webster, J. Ec. Ent. III, 502, 1910.
 Westgate & Hillman, U. S. F. B. 455, 39, 1911.
 ——— U. S. Y. B., 1905, 635.
 ——— U. S. Y. B., 1908, 569.
- Phytophaga destructor**, *see* *Mayetiola*
- Phytopti**
 Cooper, Cal. Hort. Comm. Ins. & Insect., 22, 1905.
- Phytoptus**, *see* *Eriophyes*
- Pickle worm**, *see* *Diaphania nitidalis*
- Picric acid**
 Smith, N. J. R., 1908, 367.
- Pigeon tremex**, *see* *Tremex columba*
- Pieris**, *see* *Pontia*
- Pigmeophorus americanus**
 Hadwen, Can. Ent., 1911, 141.
- Pimla annulipes**
 Girault, U. S. B. 68, 45, 1907.
 Jenne, U. S. B. 80, 30, 1909.
 Quaintance, U. S. Y. B., 1907, 443.
 Swenk, Nebr. Hort. Soc. B. 19, 16, '08.
- Pimla behrensii**
 Doane, J. Ec. Ent. V, 346, 1912.
- Pimla brassicariae**
 Howard & Fiske, U. S. B. 91, 238, 1911.
- Pimla conquisitor**
 Ainslie, U. S. B. 85, 88, 1910.
 Britton, Conn. R. 13, 228, 1914.
 Gill, U. S. B. 116, 102, 1913.
 Gossard, Fla. B. 79, 295, 1905.
 Haseman, Mo. B. 104, 324, 1912.
 Herrick, N. Y. C. B. 283, 1910, 62.
 Herrick, N. Y. C. B. 311, 286, 1912.
 Hitchings, Me. Ent. R. 3, 12, 1908.
- Howard & Fiske, U. S. B. 91, 138, 144, 1911.
- Johannsen, Me. B. 210, 27, 1913.
- Johnston, J. Ec. Ent. VI, 144, 1913.
- Johnson & Hammar, U. S. B. 116, 48, 1912.
- Patch, Me. B. 148, 265, 1907.
- Sanderson, Ins. Pests, 246, 1912.
- Schoene, N. Y. St. B. 312, 47, 1909.
- Smith, N. J. R. 1907, 419.
- Swenk, Nebr. Hort. Soc. B. 19, 16, '08.
- Pimla disparis**
 Howard & Fiske, U. S. B. 91, 238, '11.
- Pimla examiner**
 Howard & Fiske, U. S. B. 91, 237, 1911.
- Pimla inquisitor**
 Gossard, J. Ec. Ent. I, 188, 1908.
 Haseman, Mo. B. 104, 324, 1912.
 Howard & Chittenden, U. S. C. 97, 6, 1908.
 Johannsen & Patch, Me. B. 195, 243, '11.
 Schoene, N. Y. St. B. 312, 47, 1909.
 Stene, R. I. Bd. Agr. R. 21, 61, 1906.
 Swenk, Nebr. Ins. Pest. Bur. C. 6, 4, '08.
 Swenk, Nebr. Hort. Soc. B. 19, 16, 1908.
 Woods, Me. B. 137, 297, 1906.
- Pimla inquisitoriella**
 Howard & Fiske, U. S. B. 91, 237, '11.
- Pimla instigator**
 Howard & Fiske, U. S. B. 91, 237, 1911.
- Pimla masculator**
 Webster, U. S. B. 112, 39, 1912.
- Pimla ontario**
 Johannsen, Me. B. 210, 26, 1913.
- Pimla pedalis**
 Gill, U. S. B. 116, 102, 1913.
 Hitchings, Me. Ent. R. 3, 12, 1908.
 Howard & Fiske, U. S. B. 91, 137, 144, 1911.
 Patch, Me. B. 161, 340, 1908.
 Patch, Me. B. 162, 365, 1908.
- Pimla pluto**
 Howard & Fiske, U. S. B. 91, 238, '11.
- Pimla porthetriae**
 Howard & Fiske, U. S. B. 91, 238, 1911.
- Pimla pteralis**
 Brodie, Ont. Ent. Soc. R. 37, 5, 1907.
- Pimla sanguinipes**
 Ainslie, U. S. B. 85, 88, 1910.
- Pimla sp. on boll weevil**
 Hunter & Pierce, U. S. B. 114, 142, '12.
 Pierce, U. S. B. 100, 52, 1912.

- Pimpla sp. on codling moth**
Doten, Nev. B. 66, 36, 1908.
- Pimpla sp. on plum curculio**
Quaintance & Jenne, U. S. B. 103, 148, 1912.
- Pimpla sp. on Tmetocera**
Scott & Paine, U. S. D. A. B. 113, 11, '14.
- Pimpla spp.**
Swenk, Nebr. Hort. Soc. B. 19, 14, '08.
- Pimpla tenuicornis**
Howard & Fiske, U. S. B. 91, 138, '11.
- Pinacodera limbata**
Hammar, U. S. B. 115, 74, 1912.
- Pin-borer, see Pterocyclon mali**
- Pineapple scale, see Diaspis bromeliae**
- Pine butterfly, see Neophasia menapia**
- Pine-destroying beetle of Black Hills, see Dendroctonus ponderosae**
- Pine insects**
Surface, Pa. D. A. Zoöl. II, 6, 250, 1912.
- Pine leaf scale, see Chionaspis pinifoliae**
- Pinhole borers in cypress**
Hopkins, U. S. B. 58, 1909.
- Pinipestis zimmermani**
Cosens, Ont. Ent. Soc. R. 42, 16, 1913.
Felt, N. Y. St. Mus. Mem. 8, 403, 1906.
- Pinnaspis buxi**
Davis, Ill. Ent. R. 27, 126, 1912.
- Pioneer Quick Fly Exterminator**
——— U. S. D. A. Ins. & Fung. Bd.,
Ins. 3, p. 38, 1914.
- Piophilha casei**
Douglass, Ind. Ent. R. 2, 97, 1910.
Felt, N. Y. St. Mus. B. 129, 35, 1909.
Felt, N. Y. St. Mus. B. 136, 40, 1912.
Herrick, Household Ins. 288, 1914.
Mote, Ohio Nat., XIV, 309, 1914.
O'Kane, Inj. Ins. 358, 1914.
Smith, N. J. B. 203, 33, 1907.
Surface, Pa. D. A. Zoöl. III, 1, 21, 1913.
Whitmarsh, Ohio B. 253, 136, 1912.
——— U. S. Y. B., 1907, 552.
- Pipiza radicum**
Smith, Nebr. Bd. Agr. R. f. 1908, 322.
- Pissodes affinis**
Felt, N. Y. St. Mus. Mem. 8, 402, 1906.
Hopkins, U. S. Y. B., 1905, 254.
- Pissodes costatus**
Hopkins, U. S. Y. B., 1905, 253.
- Pissodes dubius**
Felt, N. Y. St. Mus. Mem. 8, 401, 1906.
- Hopkins, U. S. Y. B., 1905, 254.
- Pissodes fasciatus**
Hopkins, U. S. Y. B., 1905, 253.
- Pissodes notatus**
Felt, J. Ec. Ent. III, 340, 1910.
Felt, N. Y. R. 26, 61, 1911.
- Pissodes rotundatis**
Hopkins, U. S. Y. B., 1905, 254.
- Pissodes spp.**
Hopkins, Tech. B. 20, pt. 1, U. S. Bur. Ent., 1911.
Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
——— U. S. Y. B., 1905, 632.
- Pissodes strobi**
Britton, J. Ec. Ent. V, 465, 1912.
Britton & Walden, Conn. R. 11, 307, 1912.
Felt, N. Y. St. Mus. Mem. 8, 397, 1906.
Felt, N. Y. R. 22, 58, 1907.
Felt, J. Ec. Ent. VII, 375, 1914.
Fernald, Mass. B. 125, 58, 1908.
Hawes, Vt. B. 156, 132, 1911.
Hinds, Ala. Poly. B. 146, 101, 1909.
Hopkins, U. S. Y. B., 1905, 252.
Hopkins, U. S. C. 90, 1, 1907.
Hopkins, U. S. B. 58, 62, 1909.
Hopkins, U. S. C. 126, 3, 1910.
Walden, Conn. Farm., July 6, 1912, 1.
Walker, Ont. Ent. Soc. R. 42, 58, 1912.
Washburn, Minn. Hort. Soc., 1905, 216.
Weiss & Patterson, N. J. C. 15, 13, 1912.
Zavitz, Ont. Ent. Soc. R. 36, 125, 1906.
——— U. S. Y. B., 1906, 515.
——— U. S. Y. B., 1907, 549.
- Pistol case-bearer, see Coleophora malivorella**
- Pit-making oak scale, see Asterolecanium variolosum**
- Pityogenes consimilis**
Felt, N. Y. St. Mus. Mem. 8, 482, 1906.
- Pityogenes spp.**
Felt, N. Y. St. Mus. Mem. 8, 374, 1906.
Walker, Ent. Soc. Ont. R. 42, 59, 1912.
- Pityophthorus cariniceps**
Felt, N. Y. St. Mus. Mem. 8, 674, 1906.
- Pityophthorus coniperda, see Conophthorus**
- Pityophthorus minutissimus**
Felt, N. Y. St. Mus. Mem. 8, 295, 1905.
- Pityophthorus sp.**
Caesar, Ont. Ent. Soc. R. 40, 17, 1910.
Felt, N. Y. St. Mus. Mem. 8, 372-3, 1906.

Plagia americana

Childs, Oreg. Bien. Crop Pest R. f.
1913-1914, 185.

Hyslop, U. S. B. 95, 116, 1912.

Plagiognathus obscurus

Forbes, Ill. Ent. R. 23, 201, 1905.

Plagionotus speciosus

Britton, Conn. R. 7, 336, 1908.

Britton, Conn. Farm., July 9, 1910, 3.

Britton, J. Ec. Ent. III, 436, 1910.

Felt, N. Y. St. Mus. Mem. 8, 51, 1905.

Felt, N. Y. R. 22, 54, 1907.

Felt, U. S. B. 67, 40, 1907.

Felt, C. Gentl., 1908, 107.

Felt, J. Ec. Ent. I, 150, 1908.

Felt, N. Y. R. 23, 40, 1908.

Felt, N. Y. R. 25, 98, 1910.

Felt, N. Y. R. 26, 54, 1911.

Freeman, Farm. Guide, May 29, 1909, 4.

Hawes & Chandler, Vt. B. 176, 77, 1914.

Hitchings, Me. Conn. Agr. R., 1907,
213, 1908.

Hitchings, Me. Ent. R. 3, 9, 1908.

Hitchings, Me. Ent. R. 4, 5, 1909.

Patch, Me. B. 109, 181, 1905.

Pettit, Nat'l Stockm. & Farm., Jan. 2,
1908, 5.

—— C. Gentl., 1909, 859.

—— Farm. World, Can., 1907, 1159.

—— U. S. Y. B., 1906, 514.

—— U. S. Y. B., 1907, 550.

—— U. S. Y. B., 1908, 578.

Plagiospropherysa sp. on cabbage webworm

Chittenden & Marsh, U. S. B. 109, 31,
1912.

Plant lice, see Aphides**Plaster Paris green mixture**

—— U. S. D. A. Ins. & Fung. Bd.,
Ins. 1, p. 11, 1914.

Plathypena scabra

Britton, Conn. R. 8, 828, 1909.

—— U. S. Y. B., 1908, 573.

Platycerus quercus

Somes, Mo. Fr. Exp. Sta. Bien. R.,
1913-1914, 17.

Platydemā americanum

Felt, N. Y. St. Mus. Mem. 8, 497, 1906.

Platydemā ruficornē

Felt, N. Y. St. Mus. Mem. 8, 497, 1906.

Gossard, J. Ec. Ent. IV, 209, 1911.

Platydemā subcostatum

Felt, N. Y. St. Mus. Mem. 8, 497, 1906.

Platyaster herrickii

Bruner & Swenk, Nebr. B. 96, 16, 1907.

Gossard & Houser, Ohio B. 177, 31, '06.

Webster, U. S. C. 70, 12, 1906.

Webster, U. S. B. 67, 96, 1907.

—— U. S. Y. B., 1905, 634.

Platymetopius acutus

Osborn, U. S. B. 108, 69, 1912.

Platymetopius cinereus

Osborn, U. S. B. 108, 72, 1912.

Platymetopius frontalis

Osborn, U. S. B. 108, 71, 1912.

Platynota flavedana

Forbes, Ill. Ent. R. 23, 176, 1905.

Platynota labiosana

Sanderson, U. S. B. 57, 36, 1908.

Platynota rostrana

Hunter, Pratt & Mitchell, U. S. B. 113,
36, 1912.

Sasscer, J. Ec. Ent. IV, 297, 1911.

Platynus cincticollis

Forbes, Ill. Ent. R. 23, 177, 1905.

Platynus crenistriatus

Forbes, Ill. Ent. R. 23, 177, 1905.

Platynus obsoletus

Hammar, U. S. B. 80, 110, 1910.

Platynus placidus

Hammar, U. S. B. 115, 74, 1912.

Platypedia putnami

Brittain, Pr. Ent. Soc. B. C., 4, 15,
1914.

Cooley, Mont. B. 56, 1912.

Cooley, Mont. B. 88, 87, 1912.

Platypus compositus

Hopkins, U. S. C. 82, 2, 1907.

Hopkins, U. S. C. 127, 2, 1910.

Rosenfeld, J. Ec. Ent. III, 216, 1910.

Platypus punctulatus

Felt, N. Y. R. 28, 103, 1913.

Platypus sp.

Swaine, Can. Exp. Farms Ent. B. 7, 37,
1914.

Plectrodera scalator

Conradi, U. S. B. 60, 69, 1906.

—— Colo. R. Bd. Hort. f. 1909,
147.

Plegaderus transversus

Felt, N. Y. St. Mus. Mem. 8, 491, '06.

Pleurotropis rugosithorax

Webster & Parks, J. Agr. Res. I, 82, '13.

Pleurotropis utahensis

Phillips, J. Agr. Res. II, 28, 1914.

Plodia interpunctella

- Bethune, Ont. Ent. Soc. R. 39, 134, '09.
 Britton, Conn. R. 5, 252, 1906.
 Britton, U. S. B. 60, 154, 1906.
 Dean, Kans. Agr. Educ. I, 4, '62, 1909.
 Dean, Kans. B. 189, 218, 1913.
 Dietz, Ind. Ent. R. 6, 82, 1914.
 Felt, N. Y. St. Mus. B. 129, 37, 1909.
 Felt, N. Y. St. Mus. B. 136, 42, 1912.
 Girault, Ill. B. 156, 75, 1912.
 Girault, Ill. Ent. R. 27, 64, 1912.
 Gossard, O. Farm., May 22, '09, p. 630.
 Gossard, Ohio B. 233, 85, 1911.
 Herrick, Household Ins. 252, 1914.
 Hinds, Ala. Poly. B. 176, 52, 1914.
 O'Kane, Inj. Ins. 361, 1914.
 Parker, U. S. D. A. B. 15, 2, 1913.
 Popenoe, U. S. C. 142, 2, 1911.
 Sanderson, Ins. Pests, 191, 1912.
 Smith, N. J. B. 203, 32, 1907.
 Smith, N. C. B. 203, 17, 1909.
 Surface, Pa. D. A. Zoöl. III, 1, 19, 1913.
 Whitmarsh, Ohio B. 253, 147, 1912.
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 127.

Plum aphid, see Aphid setariae and Hyalopter arundinis

Plum curculio, see Conotrachelus nenuphar

Plum gouger, see Anthonomus scutellaris

Plum insects

- Clay, Tex. Agr. & Statis. R., 1905, 272.

Plum slug, see Caliroa amygdalina

Plum-tree sphinx, see Sphinx drupiferarum

Plusia brassicae, see Autographa

Plusia californica, see Autographa

Plusia simplex

- Chittenden, Ins. Inj. Veg., 182, 1907.
 O'Kane, Inj. Ins. 178, 1914.
 Pettit, Mich. B. 233, 175, 1906.
 Sanborn, Okla. B. 100, 30, 1912.
 Sanderson, Ins. Pests, 413, 1912.

Plutella armoracia

- Marsh, U. S. B. 109, 71, 1913.

Plutella cruciferarum, see P. maculipennis

Plutella maculipennis

- Bethune, Ont. Agr. Coll. B. 171, 18, '09.
 Chittenden, Ins. Inj. Veg., 144, 1907.
 Cooley, Mont. B. 64, 40, 1906.
 Cooley, Mont. B. 88, 85, 1912.
 Davis, J. Ec. Ent. III, 183, 1910.
 Davis, Ill. Ent. R. 27, 101, 1912.
 Fletcher, Can. Exp. Farms B. 52, 36, '05.

- Fletcher, Ont. Ent. Soc. R. 36, 86, 1906.
 Gibson, Ont. Ent. Soc. R. 36, 112, 1906.
 Gibson, Ont. Ent. Soc. R. 42, 11, 1912.
 Houghton, Del. R. 16-17-18, 89, 1907.
 Judson, N. Y. C. B. 292, 258, 1911.
 Lochhead, Syn. Ec. Ent. 51, 1914.
 Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 10, 1906.
 Lovett, Oreg. Coll. B. 91, 23, 1913.
 O'Kane, Inj. Ins. 178, 1914.
 Parker, Mont. C. 28, 16, 1913.
 Patch, Me. B. 134, 223, 1906.
 Pettit, Mich. B. 233, 172, 1906.
 Sanborn, Okla. B. 100, 20, 1912.
 Sanderson, Ins. Pests, 366, 1912.
 Sherman, N. C. Dept. Agr. B., 32, 7, 31, 1911.
 Smith, N. C. B. 197, 27, 1908.
 Symons, Md. B. 101, 186, 1905.
 ——— U. S. Y. B., 1907, 544.
 ——— U. S. Y. B., 1908, 571.

Podabrus pruinosus

- Wilson, J. Ec. Ent. VI, 457, 1913.

Podisus maculiventris

- Britton, Conn. R. 8, 822, 1909.
 Brooks, W. Va. R. f. 1909-1910, 190.
 Brooks, W. Va. B. 128, 182, 1910.
 Chittenden, U. S. B. 66, 64, 1909.
 Chittenden, U. S. B. 127, 9, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 608, 1906.
 Folsom, Ill. B. 134, 147, 1909.
 Morrill, U. S. B. 60, 155, 1906.
 Popenoe, U. S. B. 82, 3, 1909.
 Quaintance, U. S. C. 102, 6, 1908.
 Sanderson, U. S. B. 57, 34, 1906.
 Sanderson, Ins. Pests, 294, 1912.
 Smith, Nebr. Ins. Pest Bur. C. 5, 3, '08.
 Swenk, Nebr. Hort. Soc. B. 19, 14, 16, 1908.
 Webster, Ann. Ent. Soc. Am. IV, 185, 1911.

- Webster, Iowa B. 130, 190, 1912.

Podisus marginiventris

- Chittenden, U. S. B. 82, 85, 1911.

Podisus modestus

- Felt, N. Y. St. Mus. Mem. 8, 610, 1906.
 Hewitt, Can. Exp. Farms Ent. B. 5, 35, 1912.
 Hitchings, J. Ec. Ent. III, 148, 1910.
 Patch, Me. B. 148, 262, 277, 1907.
 Patch, Me. B. 161, 343, 347, 1908.
 Patch, Me. B. 162, 364, 1908.

- Podisus mucronatus**
Chittenden, U. S. B. 66, 64, 1909.
- Podisus placidus**
Felt, N. Y. St. Mus. Mem. 8, 607, 1906.
- Podisus sp.**
Felt, C. Gentl., 1908, 704.
- Podisus spinosus**, *see* **P. maculiventris**
- Podosesia fraxini**
Felt, N. Y. St. Mus. Mem. 8, 92, 1905.
Washburn, Minn. R. 12, 94, 1908.
- Podosesia syringae**
Britton, Conn. R. 5, 260, 1906.
Felt, N. Y. St. Mus. Mem. 8, 104, 1905.
Felt, C. Gentl., 26 Aug. 1909, 803.
Forbes, Ill. B. 151, 489, 1911.
Forbes, Ill. Ent. R. 26, 27, 1911.
Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
Washburn, U. S. B. 60, 85, 1906.
——— Colo. R. St. Bd. Hort. I, '09, 148.
——— C. Gentl., 1909, 803.
——— U. S. Y. B., 1908, 578.
- Poecilocapsus lineatus**
Bethune, Ont. Agr. Coll. B. 171, 7, 1909.
Felt, N. Y. R. 27, 103, 1912.
Fletcher, Can. Exp. Farms B. 52, 40, 1905.
Forbes, Ill. Ent. R. 23, 200, 1905.
Gibson, Ont. Ent. Soc. R. 36, 108, 1906.
Gibson, Ont. Ent. Soc. R. 41, 16, 1911.
Gossard, Ohio B. 164, 25, 1905.
Lochhead, Syn. Ec. Ent. 41, 1914.
O'Kane, Inj. Ins. 311, 1914.
Sanderson, Ins. Pests, 481, 1912.
Slingerland & Crosby, Man. Fr. Ins. 347, 1914.
Surface, Pa. D. A. Zool. III, 1, 12, 1913.
- Poeciloscytus basalis**
Smith, N. J. R., 1908, 331.
- Pogonocherus mixtus**
Felt, N. Y. St. Mus. Mem. 8, 663, 1906.
- Pogonomymex barbatus**
Forbes, Ill. Ent. R. 23, 159, 1905.
Holloway, U. S. C. 171, 6, 1913.
Morrill, J. Ec. Ent. VI, 194, 1913.
Wildermuth, U. S. D. A. B. 124, 26, '14.
——— Rur. N. Y., 1908, 649.
- Pogonomymex barbatus molefaciens**
Hunter, U. S. C. 148, 4, 1912.
- Pogonomymex occidentalis**
Dean, Kans. Agr. Educ. I, 4, 79, 1909.
Headlee, Kans. B. 155, 338, 1908.
- Headlee & Dean, Kans. B. 154, 165, '08.
Herrick, Household Ins. 173, 1914.
Swenk, Nebr. Bd. Agr. R. f. 1910, 368.
- Pogonomymex sp.**
Headlee, Kans. Farm., June 25, 1908, 726.
McElroy, Farm & Ranch, Jan. 5, '07, 7.
Deseret Farm., Apr. 13, 1912, 683.
- Poison exponent in insecticides**
Holloway, J. Ec. Ent. V, 452, 1912.
- Polia aedon**
Cooley, Mont. B. 88, 86, 1912.
- Polistes annularis**
Chittenden, U. S. B. 66, 64, 1909.
- Polistes flavus**
Hunter, Pratt & Mitchell, U. S. B. 113, 36, 1912.
- Polistes pallipes**
Quaintance, U. S. C. 102, 7, 1908.
- Polistes rubiginosus**
Hunter, Pratt & Mitchell, U. S. B. 113, 36, 1912.
- Polistes sp.**
Felt, N. Y. St. Mus. B. 129, 16, 1909.
Felt, N. Y. St. Mus. B. 136, 23, 1912.
Quaintance & Brues, U. S. B. 50, 109, 1905.
- Polistes texanus**
Hunter, Pratt & Mitchell, U. S. B. 113, 36, 1912.
- Pollenia rudis**
Britton, Conn. R. 10, 710, 1911.
Felt, N. Y. St. Mus. B. 129, 15, 1909.
Felt, N. Y. St. Mus. B. 136, 22, 1912.
Herrick, Household Ins. 38, 1914.
Howard, U. S. C. 71, 1, 1906.
Howard, U. S. F. B. 459, 5, 1911.
Parrott, J. Ec. Ent. VII, 487, 1914.
Whitmarsh, Ohio B. 253, 111, 1912.
- Pollination of flowers**
Britton & Viereck, Conn. R. 5, 207, '06.
- Pollinia pollini**
Carnes, Cal. Hort. Comm. Bien. R. 2, 168, 1907.
- Polycaon confertus**
Cordley, Better Fr., Aug. 1912, 12.
Essig, Cal. Hort. B. II, 7, 587, 1913.
Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 161.
——— Pac. Rur. Press, LXXIII, 371, 1907.
——— Pac. Rur. Press, LXXVI, 83, '08.

- Pac. Rur. Press, LXXIX, 443, 1910.
 —— Pac. Rur. Press, LXXXVII, 687, 1914.
- Polycaon stoutii**
 Ehrhorn, Pac. Rur. Press, LXXVI, 404, 1908.
- Polychrosis botrana**, *see* **P. viteana**
- Polychrosis viteana**
 Baldwin, Ind. Ent. R. 5, 103, 1912.
 Bethune, Ont. Agr. Coll. B. 158, 33, '07.
 Burgess, Ohio Nurs. Orch. Insp. B. 5, 10, 1905.
 Burgess, U. S. B. 52, 54, 1905.
 Burgess, U. S. B. 60, 72, 1906.
 Burgess, Ohio Nurs. Orch. Insp. R. 4, 11, 1906.
 Burgess, Ohio Nurs. Orch. Insp. R. 5, 23, 1907.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 101, 1913.
 Douglass, Ind. Ent. R. 1, 138, 1908.
 Douglass, Ind. Ent. R. 2, 69, 1910.
 Douglass, Ind. Ent. R. 3, 194, 1910.
 Ehrhorn, Pac. Rur. Press, LXXVI, 404, 1908.
 Felt, N. Y. Fr. Grow. Assoc., 1906, 124.
 Fletcher, Ont. Ent. Soc. R. 36, 87, 1906.
 Garman, J. Ec. Ent. V, 468, 1912.
 Goodwin, O. Farm., Nov. 28, 1914, 489.
 Gossard, Nat'l Stockm. & Farm., Mar. 15, 1906, 11.
 Gossard, Ohio P. B. 292, 1908.
 Gossard, J. Ec. Ent. I, 187, 1908.
 Gossard Ohio B. 233, 135, 1911.
 Gossard, Ohio Hort. Soc., 1913, 48.
 Gossard & Houser, Ohio C. 63, 1906.
 Herrick, Rur. N. Y., 1910, 261.
 Jarvis, Conn. Storrs B. 56, 255, 1909.
 Johnson, Pa. Dept. Agr. R. 17, 587, '11.
 Johnson, U. S. B. 97, 63, 1911.
 Johnson & Hammar, U. S. B. 116, 15, 1912.
 Lochhead, Ont. Ent. Soc. R. 36, 135, '06.
 Lochhead, Syn. Ec. Ent. 56, 1914.
 O'Kane, Inj. Ins. 341, 1914.
 Quaintance & Shear, U. S. F. B. 284, 12, 1907.
 Sanderson, Ins. Pests, 530, 1912.
 Sill, Pa. Dept. Agr. B. 217, 50, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 430, 1914.
- Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 13.
 Surface, Pa. D. A. Zoöl. III, 6, 175, '05.
 Surface, Pa. D. A. Zoöl. I, 4, 176, 1911.
 Swenk, Nebr. Hort. Soc., 1909, 91, 109.
 Thorne, Ohio B. 263, xxi, 1913.
 —— U. S. Y. B., 1905, 633.
 —— U. S. Y. B., 1906, 513.
 —— Va. Agr. R. f. 1910, 139, 1910.
- Polydrusus impressifrons**
 Parrott, J. Ec. Ent. II, 79, 1909.
 Parrott, J. Ec. Ent. VI, 63, 1913.
- Polygnotus hiemalis**
 Gossard & Houser, Ohio B. 177, 31, '06.
 Howard & Fiske, U. S. B. 91, 21, 1911.
 Tucker, Kans. Farm., Apr. 12, 1906, 404.
 Webster, U. S. C. 70, 12, 1906.
 Webster, U. S. B. 67, 95, 1907.
- Polygnotus minutus**
 Webster, U. S. B. 67, 95, 1907.
- Polygonia comma**
 Felt, N. Y. St. Mus. Mem. 8, 545, 1906.
 Pettit, Mich. B. 233, 183, 1906.
 Sanderson, Ins. Pests, 282, 1912.
- Polygonia interrogationis**
 Felt, N. Y. St. Mus. Mem. 8, 544, 1906.
 Pettit, Mich. B. 233, 183, 1906.
 Sanderson, Ins. Pests, 280, 1912.
- Polygonia prognæ**
 Felt, N. Y. St. Mus. Mem. 8, 546, 1906.
- Polygraphus rufipennis**
 Felt, N. Y. St. Mus. Mem. 8, 386, 1906.
 Swaine, Ont. Ent. Soc. R. 43, 89, 1913.
 Walker, Ont. Ent. Soc. R. 42, 61, 1912.
- Polynema bifasciatipennis**
 Parrott & Fulton, N. Y. St. B. 388, 426, 1914.
- Polynema striaticorne**
 Hodgkiss, N. Y. St. Tech. B. 17, 91, '10.
- Polyphemus moth**, *see* **Telea polyphemus**
- Polyphylla decemlineata**
 Treherne, Can. Exp. Farms Ent. B. 8, 43, 1914.
- Polyplax spinulosus**
 Banks, Publ. Health Mar. Hosp. Serv. B. 30, 79, 1910.
- Polysphincta texana**
 Cushman, Pr. Ent. Soc. Wash. XV, 157, 1913.
- Pomace fly**, *see* **Drosophila ampelophila**
- Pomphopaea aenea**
 Gossard, Ohio B. 198, 56, 1908.

- U. S. Y. B., 1908, 577.
- Pomphopoea sayi**
Felt, N. Y. R. 25, 94, 1910.
Felt, N. Y. R. 27, 99, 1912.
Fernald, J. Ec. Ent. V, 247, 1912.
Fernald, Mass. R. 24, 84, 1912.
Gibson, Ont. Ent. Soc. R. 42, 86, 1912.
- Pomphopoea sp.**
Smith, N. J. R., 1911, 415.
- Pomphopaea texana**
Conradi, U. S. B. 60, 68, 1906.
Conradi, Tex. B. 89, 42, 1907.
——— U. S. Y. B., 1905, 633.
- Ponderous pine-borer, see Ergates spiculatus**
- Ponderous sawyer, see Ergates spiculatus**
- Ponera coarctata**
Vickery, U. S. B. 85, 116, 1910.
- Ponera coarctata pennsylvanica**
Vickery, U. S. B. 85, 116, 1910.
- Pontania bozemani**
Cooley, Mont. B. 98, 128, 1914.
- Pontania desmodioides**
Felt, N. Y. St. Mus. Mem. 8, 638, 1906.
- Pontania hyalina**
Felt, N. Y. St. Mus. Mem. 8, 638, '06.
- Pontania pisum**
Felt, N. Y. St. Mus. Mem. 8, 637, 1906.
- Pontania pomum**
Felt, N. Y. St. Mus. Mem. 8, 636, '06.
- Pontania populi**
Gibson, Ont. Ent. Soc. R. 44, 20, 1914.
- Pontia napi**
Chittenden, Ins. Inj. Veg., 139, 1907.
Pettit, Mich. B. 233, 169, 1906.
Rumsey, W. Va. R. f. 1909-1910, 83.
Rumsey & Brooks, W. Va. B. 120, 349, 1909.
Sanderson, Ins. Pests, 361, 1912.
——— U. S. Y. B., 1906, 511.
- Pontia oleraceae, see P. napi**
- Pontia protodice**
Britton, Conn. R. 12, 293, 1913.
Chittenden, U. S. C. 60, 3, 1905.
Chittenden, Ins. Inj. Veg., 139, 1907.
Newell, Proc. La. Agr. Soc. 18, 45, 1905.
O'Kane, Inj. Ins. 177, 1914.
Pettit, Mich. B. 233, 169, 1906.
Rumsey, W. Va. R. f. 1909-1910, 83.
Rumsey & Brooks, W. Va. B. 120, 349, 1909.
Sanborn, Okla. B. 100, 18, 1912.
- Sanderson, Ins. Pests, 360, 1912.
- Sherman, N. C. Dept. Agr. B., 32, 7, 30, 1911.
- Smith, Ga. Bd. Ent. B. 16, 51, 1905.
- Smith, N. C. B. 197, 22, 1908.
- Pontia rapae**
Bennett, Colo. B. 143, 6, 1909.
Bethune, Ont. Agr. Coll. B. 171, 15, '09.
Bremner, Cal. Hort. Comm. Destr. Ins. 1910, 9.
Chandler, Mo. B. 102, 269, 1912.
Chittenden, Conn. Farm., July 8, '05, 14.
Chittenden, U. S. C. 60, 1, 1905.
Chittenden, Ins. Inj. Veg., 136, 1907.
Chittenden, Va. Truck Exp. Sta. B., 2, 36, 1909.
Close & White, Md. B. 133, 195, 1909.
Conradi, Tex. B. 89, 6, 1907.
Cooley, Mont. B. 88, 85, 1912.
Cooley, Mont. B. 92, 59, 1912.
Cooley, Mont. B. 98, 126, 1914.
Corbett, U. S. F. B. 433, 10, 1911.
Criddle, J. Ec. Ent. V, 250, 1912.
Davis, J. Ec. Ent. III, 180, 1910.
Davis, Ill. Ent. R. 26, 104, 133, 1911.
Douglass, Ind. Ent. R. 2, 73, 1910.
Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 227, 1907.
Essig, Cal. Hort. B. II, 1-2, 196, 1913.
Fletcher, Ont. Ent. Soc. R. 35, 51, 1905.
Fletcher, Can. Exp. Farms B. 52, 36, '05.
Fletcher, Farm. Advocate, Can., 1907, 1866.
Fulton, Wright & Gregg, Pa. B. 110, 20, 1911.
Garcia, N. Mex. B. 68, 9, 1908.
Gibson, Ont. Ent. Soc. R. 36, 111, 1906.
Gibson, Can. Hort. XXXII, 153, 1909.
Gibson, Ont. Ent. Soc. R. 39, 120, 1909.
Gibson, Ont. Ent. Soc. R. 42, 11, 1912.
Gillette, Colo. Fr. Grow., Aug., 1908, 6.
Gillette, S. W. Stockm., Aug. 21, '08, 15.
Gossard, O. Farm., June 7, 1913, 719.
Headlee, Kans. Farm., Aug. 20, '08, 880.
Houghton, Del. R. 16-17-18, 1907.
Jarvis, Ont. Ent. Soc. R. 37, 50, 1907.
Jarvis, Conn. Storrs B. 56, 247, 1909.
Judson, N. Y. C. B. 292, 258, 1911.
Legate, Mass. Crop R. f. May 1911, 39.
Lewis, Pr. Ga. Hort. Soc. f. 1912, 10.
Lochhead & Jarvis, Ont. Agr. Coll., 150, 9, 1906.

- Loveland, R. I. R., 1911, *Ent. Dept.*, 11, 1911.
- Lovett, *Oreg. Coll. B.* 91, 22, 1913.
- Morgan, *Tenn. Bd. Ent. R. f.* 1910, 54.
- Newell, *Proc. La. Agr. Soc.* 18, 45, 1905.
- Newell, *La. Hort. Soc.*, 1908, 43.
- Newell & Rosenfeld, *La. Crop Pest Comm. C.* 27, 95, 1909.
- O'Kane, *Inj. Ins.* 176, 1914.
- Parker, *Mont. C.* 28, 9, 1913.
- Pettit, *Mich. B.* 233, 169, 1906.
- Price, *Va. C.* 7, 56, 1909.
- Rosenfeld, *J. Ec. Ent.* III, 214, 1910.
- Rumsey, *W. Va. R. f.* 1909-1910, 82.
- Rumsey & Brooks, *W. Va. B.* 120, 347, 1909.
- Sanborn, *Okla. B.* 100, 17, 1912.
- Sanderson, *Ins. Pests*, 355, 1912.
- Sherman, *Prog. Farm.*, Apr. 2, 1908, 17.
- Sherman, *N. C. Dept. Agr. B.*, 32, 7, 25, 1911.
- Sherman, *Prog. Farm.*, Mar. 8, '13, 334.
- Slingerland & Crosby, *N. Y. C. B.* 252, 345, 1908.
- Slingerland, Herrick & Crosby, *N. Y. C. B.* 283, 470, 1910.
- Smith, *Ga. Bd. Ent. B.* 16, 50, 1905.
- Smith, *N. C. B.* 197, 20, 1908.
- Smith, *N. J. Bd. Agr. R.* 37, 185, 1910.
- Surface, *Pa. D. A. Zool. V.* 12, 373, 1908.
- Symons, *Md. B.* 101, 184, 1905.
- Tiebout, *La. B.* 140, 15, 1913.
- Treherne, *Pr. Ent. Soc. B. C.*, 4, 29, '14.
- Turner, *Ala. Hort. Soc. R.* 7, 225, 1910.
- Weed, *Am. Agric.*, June 28, 1913, 782.
- Weed, *Or. Judd. Farm.*, June 28, 1913, 868.
- Yothers, *Cal. Cult.*, XLIII, 176, 1914.
- Young, *Ont. Ent. Soc. R.* 38, 23, 1908.
- *U. S. Y. B.*, 1907, 544.
- *U. S. Y. B.*, 1908, 571.
- Pontia spp.**
- Reed, *Ga. Hort. Soc. f.* 1914, 61.
- Poplar borer**, *see Saperda calcarata*
- Poplar carpenter worm**, *see Cossus centerensis*
- Poplar girdler**, *see Saperda concolor*
- Poplar insects**
- *Pr. Columbus Hort. Soc.*, '06, 78.
- Poplar-stem gall-louse**, *see Pemphigus populi-caulis*
- Poplar tent-maker**, *see Melalopha inclusa*
- Porizon cooki**
- Smith, *N. J. B.* 225, 22, 1909.
- Porosagrotis delorata**
- Gibson, *Can. Exp. Farms Ent. B.* 3, 25, 1912.
- Gibson, *J. Ec. Ent.* VII, 201, 1914.
- Porosagrotis vetusta**
- Chittenden, *U. S. B.* 109, 47, 1912.
- Porthetria dispar**
- Armstrong, *R. I. Bd. Agr. R.* 20, 102, 1905.
- Armstrong, *Vt. Hort. Soc. R.* 8, 101, '11.
- Bailey, *Vt. Agr. R.* 5, 27, 1913.
- Bentley, *Tenn. Dept. Agr. Bien. R.*, 1909-1910, 40.
- Blanchard & Horvath, *Mass. G. and B-T. R.* 3, 200, 1908.
- Bremner, *Cal. Hort. I.* 5, 159, 1912.
- Britton, *Conn. B.* 153, 4, 1906.
- Britton, *Conn. Farm.*, Mar. 24, 1906, 1.
- Britton, *Conn. Farm.*, June 2, 1906, 1.
- Britton, *Conn. R.* 5, 246, 1906.
- Britton, *Conn. R.* 6, 235, 1907.
- Britton, *Conn. Bd. Agr. R.* 40, 140, 1907.
- Britton, *Conn. Farm.*, Jan. 12, 1907, 4.
- Britton, *Conn. Ent. R.* 7, 300, 1907.
- Britton, *U. S. B.* 67, 22, 1907.
- Britton, *Conn. Farm.*, May 16, '08, 1.
- Britton, *Conn. R.* 7, 300, 1908.
- Britton, *Conn. Farm.*, Mar. 6, 1909, 2.
- Britton, *Conn. R.* 8, 772, 1909.
- Britton, *Conn. Farm.*, July 16, 1910, 1.
- Britton, *Conn. R.* 9, 336, 1910.
- Britton, *Conn. R.* 10, 671, 1911.
- Britton, *J. Ec. Ent.* V, 194, 465, 1912.
- Britton, *Conn. R.* 12, 224, 1913.
- Britton, *Conn. R.* 13, 198, 1914.
- Britton, *J. Ec. Ent.* VII, 250, 1914.
- Britton & Caffrey, *Conn. R.* 11, 277, '12.
- Bruner, *Nebr. Ins. Pest Bur. C.* 12, 2, 1908.
- Bruner, *Nebr. Bd. Agr. R. f.* 1909, 231.
- Bruner, *Nebr. Farm.*, Apr. 21, 1909, p. 432.
- Burgess, *J. Ec. Ent.* III, 38, 1910.
- Burgess, *J. Ec. Ent.* VI, 258, 1913.
- Burgess, *J. Ec. Ent.* VII, 83, 1913.
- Burgess, *U. S. B.* 119, 7, 1913.
- Burgess, *U. S. F. B.* 564, 3, 1914.
- Burgess & Rogers, *J. Ec. Ent.* VI, 75, '13.
- Cooper, *Cal. Hort. Comm. C.* Feb. 1906, 2.

***Porthetria dispar* (Cont'd)**

- Cotton, Ohio Nurs. Orch. Insp. B. 7, 40, 1906.
 Douglass, Ind. Ent. R. 2, 55, 1910.
 Ehrhorn, Mass. G. & B-T R. 3, 207, '08.
 Ehrhorn, Pac. Rur. Press, LXXVI, 372, 1908.
 Ellsworth, Mass. Bd. Agr. R. 55, XXII, 1908.
 Farquhar, Prai. Farm., Jan. 12, 1905, 11.
 Felt, C. Gentl., 1905, 962.
 Felt, N. Y. R. 20, 382, 1905.
 Felt, N. Y. St. Mus. Mem. 8, 116, 1905.
 Felt, N. Y. St. Mus. B. 103, 7, 1906.
 Felt, Pr. N. Y. Fr. Grow. Assoc., 5 Meet., 71, 1906.
 Felt, Pr. N. Y. Fr. Grow. Assoc., 4th East. Meet., 126, 1906.
 Felt, N. Y. R. 22, 45, 1907.
 Felt, Pr. N. Y. Fr. Grow. Assoc., 5th East. Meet., 146, 1907.
 Felt, Rur. N. Y., 1907, 86.
 Felt, U. S. B. 67, 39, 1907.
 Felt, J. Ec. Ent. I, 275, 1908.
 Felt, Mass. G. & B-T R. 3, 210, 1908.
 Felt, N. Y. R. 24, 41, 1909.
 Felt, C. Gentl., 1909, 756.
 Felt, C. Gentl., Apr. 13, 1911, 358.
 Felt, N. Y. R. 27, 42, 1912.
 Fernald, Mass. R. 17, 114, 1905.
 Fernald, Mass. R. 18, 151, 1906.
 Fernald, Mass. G. & B-T R. 2, 117, 1907.
 Fernald, Mass. B. 125, 60, 1908.
 Fernald, Mass. G. & B-T R. 3, 129, 1908.
 Fernald, Mass. R. 22, II, 72, 1910.
 Fernald & Fernald, Mass. R. 17, 114, '05.
 Fiske, U. S. C. 164, 1, 1913.
 Fletcher, Mass. G. & B-T R. 3, 204, '08.
 Forbes, Ill. Ent. R. 23, 87, 1905.
 Forbes, Mass. G. & B-T R. 3, 217, '08.
 Forbes, Ill. Hort. Soc. f. 1909, 96.
 Forbes, Ill. Ent. R. 26, 14, 1911.
 Forbes, Ill. B. 151, 476, 1911.
 Froggatt, Mass. G. & B-T R. 3, 201, '08.
 Frost, Pr. Ent. Soc. Wash. X, 72, 1908.
 Funk, Pa. Dept. Agr. B. 152, 220, 1907.
 Gillette, Colo. Fr. Grow., July 1910, 13.
 Headlee, N. J. Hort. Soc., 1913, 55.
 Heymons, Mass. G. & B-T R. 3, 198, '08.
 Hitchings, Me. Comm. Agr. R., 1906, 179, 1906.
 Hitchings, Me. Comm. Agr. R., 1907, 229, 1908.
 Hitchings, Me. Dept. Agr. Quar. B., Vol. VI, 1, 2, 1907.
 Hitchings, Me. Ent. R. 2, 9, 1907.
 Hitchings, Me. Ent. R. 3, 25, 1908.
 Hitchings, Me. Ent. R. 4, 4, 1909.
 Hitchings, Me. Ent. R. 5, 11, 18, 1910.
 Hitchings, Me. Comm. Agr. R., 1910, 52, 1911.
 Hitchings, Me. Ent. R. 6, 10, 1911.
 Hopkins, U. S. Y. B., 1907, 153, 150.
 Houser, Ohio B. 194, 188, 1908.
 Howard, U. S. Y. B., 1905, 123.
 Howard, Mass. G. & B-T R., 124, 1906.
 Howard, U. S. R. Ent., 1906, 9.
 Howard, U. S. F. B. 275, 7, 1907.
 Howard, U. S. R. Ent., 1907, 11.
 Howard, U. S. F. B. 275, 14, 1907.
 Howard, U. S. R. Ent., 1908, 9.
 Howard, U. S. R. Ent., 1909, 6.
 Howard, Tech. B. 19, pt. 1, U. S. Bur. Ent., 1910.
 Howard, U. S. R. Ent., 1910, 10.
 Howard, U. S. R. Ent., 1912, 6.
 Howard, U. S. R. Ent., 1913, 1.
 Howard, U. S. R. Ent., 1914, 1.
 Johannsen, Me. B. 177, 24, 1910.
 Johannsen, Me. B. 207, 452, 1912.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 355.
 Kirkland, Am. Jr. Pub. Hyg., 1905, 397.
 Kirkland, Mass. G. & B-T B. 1, 5, '05.
 Kirkland, Conn. Farm., Mar. 17, '06, 1.
 Kirkland, Mass. G. & B-T R. 1, 1906.
 Kirkland, Mass. G. & B-T R. 2, 1907.
 Kirkland, R. I. Bd. Agr. R. 22, 195, '07.
 Kirkland, Mass. G. & B-T R. 3, 1908.
 Kirkland, Ont. Ent. Soc. R. 38, 28, '08.
 Kirkland, Mass. G. & B-T R. 4, 1909.
 Lamson, Conn. Storrs B. 71, 83, 1912.
 Lochhead, Syn. Ec. Ent. 64, 1914.
 Lounsbury, Mass. G. & B-T R. 3, 193, 1908.
 Marlatt, U. S. C. 58, 1, 1905.
 Marlatt, U. S. F. B. 453, 1911.
 Marlatt, U. S. Fed. Hort. Bd. R., 1913.
 Melander, Wash. Hort. Assoc. 8th R., 151, 1912.
 Morgan, Mass. G. & B-T R. 3, 213, 1908.
 Morgan, Tenn. Bd. Ent. R. f. 1910, 25.

- Mosher & Webber, J. Ec. Ent. VII, 368, 1914.
- Mundon, Me. B. 128, 67, 1906.
- O'Kane, N. H. Moth C. 1, 1912.
- O'Kane, N. H. Moth C. 3, 1912.
- O'Kane, N. H. Moth C. 4, 1913.
- O'Kane, N. H. Moth C. 5, 1913.
- O'Kane, Inj. Ins. 290, 1914.
- Osborn, Mass. G. & B-T R. 3, 214, '08.
- Parrott, J. Ec. Ent. VI, 65, 1913.
- Patch, Me. B. 108, 161, 1905.
- Patch, Me. Pom. Soc., 1904-1905, 115.
- Patch, Me. B. 134, 209, 1906.
- Patch, Me. B. 148, 261, 1907.
- Patch, Me. B. 162, 352, 1908.
- Philbrook, Me. Ent. R. 4, 18, 1909.
- Philbrook, Me. Pom. Soc. R. f. 1909-1910, 107.
- Philbrook, Me. Ent. R. 5, 35, 1910.
- Philbrook, Me. Ent. R. 6, 25, 1911.
- Philbrook, Me. Comm. Agr. R., 1913, 103, 1914.
- Pike, Me. Comm. Agr. R. f. 1911, 68.
- Pike, Me. Comm. Agr. R. f. '12, 97, 197.
- Pratt, Mass. Bd. Agr. R. 52, 217, 1905.
- Pratt, Mass. Bd. Agr. R. 55, 181, 1908.
- Rane, Mass. For. R. 6, 67, 1909.
- Rane, Mass. For. R. 7, 67, 1910.
- Rane, J. Ec. Ent. III, 36, 1910.
- Rane, N. H. Hort. Soc., 1910, 68.
- Rane, Mass. For. R. 8, 81, 1911.
- Rane, Mass. For. R. 9, 65, 1912.
- Rane, C. Gentl., Dec. 28, 1912, 4.
- Rane, Mass. For. R. 10, 75, 1913.
- Rogers & Burgess, U. S. B. 87, 9, 1910.
- Sanderson, N. H. Bd. Agr. R., 1905-1907, 291.
- Sanderson, N. H. R. 17-19, 315, 1906.
- Sanderson, U. S. B. 60, 75, 1906.
- Sanderson, N. H. B. 129, 263, 1907.
- Sanderson, J. Ec. Ent. III, 211, 1910.
- Sanderson, Ins. Pests, 563, 1912.
- Schoene & Fulton, N. Y. St. C. 25, 9, '13.
- Severin, Mass. G. & B-T R. 3, 202, 1908.
- Shaw, Ohio Bd. Agr. R. 64, 1909, 630.
- Shaw, Ohio Nurs. Orch. Insp. B. 10, 17, 1910.
- Silvestri, Mass. G. & B-T R. 4, 66, 1909.
- Slingerland, Mass. G. & B-T R. 3, 222, 1908.
- Slingerland & Crosby, Man. Fr. Ins. 128, 1914.
- Smith, N. J. R., 1905, 537, 548.
- Smith, N. J. R., 1906, 546.
- Smith, N. J. R., 1907, 420.
- Smith, Mass. G. & B-T R. 3, 219, 1908.
- Smith, N. J. Bd. Agr. R. 36, 160, 1909.
- Smith, N. J. Bd. Agr. R. 37, 193, 1910.
- Smith, N. J. R., 1911, 405.
- Smith, N. J. Bd. Agr. R. 38, 54, 1911.
- Smith, Cal. Hort. B. II, 6, 558, 1913.
- Stene, Comm. Suppr. G. & B-T Moths R. f. 1906.
- Stene, R. I. G. & B-T C. 1, 6, 1906.
- Stene, R. I. Bd. Agr. R. 21, 54, 1906.
- Stene, R. I. Nurs. Insp., 1906, 38.
- Stene, R. I. G. & B-T R., 1906, 11, 1907.
- Stene, Comm. Suppr. G. & B-T Moths R. f. 1907.
- Stene, R. I. G. & B-T R. 1907, 15, 1908.
- Stene, R. I. Bd. Agr. R. 24, 31, 1909.
- Stene, R. I. Bd. Agr. R. f. 1909, 79, 1910.
- Stene, Comm. Suppr. G. & B-T Moths R. f. 1911, 17.
- Stene, R. I. R. 1912, Ent. Dept. 6, 1912.
- Stene, R. I. R. 1914, Ent. Dept., 47, '14.
- Stone, Mass. R. 23, II, 47, 1911.
- Stuart, Vt. C. 2, 1909.
- Surface, Pa. Dept. Agr. R. 17, 159, 1910.
- Van Buren & Husted, N. Y. Dept. Agr. B. 24, 480, 1911.
- Washburn, Minn. Ent. R. 13, 72, 1910.
- Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 166.
- Woodward, Rur. N. Y., 1905, 107.
- Cal. Hort. Comm. Bien. R. 2, 236, 1907.
- Conn. Exp. Sta. R. 7, 300, 1908.
- C. Gentl., 1905, 443.
- C. Gentl., 1906, 681.
- N. Eng. Farm., June 30, 1906, p. 6.
- R. I. Bd. Agr. R. 28, 13, 1913.
- R. I. Bd. Agr. R. 29, 11, 1914.
- U. S. Fed. Hort. Bd. Quar. Not. 4, 1912.
- U. S. Fed. Hort. Bd. Quar. Not. 10, 1913.
- U. S. Fed. Hort. Bd. Quar. Not. No. 17, 1914.
- U. S. Y. B., 1905, 635.
- U. S. Y. B., 1906, 514.
- U. S. Y. B., 1907, 550.

Porthetria dispar and birds

Collins, J. Ec. Ent. III, 343, 1910.

Porthetria dispar, disease of

Glaser, Science XXXVI, 219, 1912.

Glaser, Psyche, 1914, 185.

Glaser & Chapman, J. Ec. Ent. VI, 479, 1913.

Kirkland, Mass. G. & B-T R. 4, 53, 1909.

Rane, Mass. For. R. 7, 98, 1911.

Rane, Mass. For. R. 8, 90, 1912.

Rane, Mass. For. R. 9, 73, 1913.

Reiff, Psyche, 1909, 99.

Reiff, Spec. R. (Boston) 1911.

Porthetria dispar, eggs resistant to birds

Reiff, Psyche, 1910, 161.

Porthetria dispar, eggs resistant to cold

Reiff, Psyche, 1910, 69.

Porthetria dispar—enemies of

Howard, U. S. R. Ent., 1905, 281.

Howard, U. S. F. B. 275, 15, 1907.

Howard, Ont. Ent. Soc. R. 39, 121, 1909.

Howard, Mass. G. and B-T R. 4, 70, '09.

Howard, Techn. B. Bur. Ent., 19, pt. 1, 1910.

Howard, U. S. R. Ent., 1911, 9.

Howard, J. Ec. Ent. VII, 378, 1914.

Howard & Fiske, U. S. B. 91, 13, 1911.

Porthetria dispar—legislation

Britton, Conn. R. 7, 308, 1908.

Rane, Mass. For. R. 8, 141, 1912.

——— Conn. Exp. Sta. R. 7, 308, 1908.

Porthetria dispar, Quarantine

Hays, Me. Comm. Agr. R., 1912, 76.

Rogers, J. Ec. Ent. VII, 116, 1914.

——— Conn. Farm., July 12, 1913, 8.

——— Me. Comm. Agr. R. f. 1912, 76.

——— U. S. Fed. Hort. Bd., Nov. 30, 1914.

Potassium sulphide

Smith, N. J. R., 1904, 588, 1905.

Taft, Mich. Hort. Soc., 1908, 142, 1909.

Potato flea-beetle, see Epitrix cucumeris**Potato insects**

Caesar, Farm. Advocate, Can., '10, 829.

Chandler, Mo. Hort. Soc., 1909, 369.

Clay, Tex. Agr. & Statis. R., 1905, 273.

Headlee, N. J. Bd. Agr. R. 40, 135, 1912.

Headlee, N. J. Bd. Agr. R. 41, 113, 1914.

Patch, Me. B. 134, 213, 1906.

Patch, Me. B. 211, 31, 1913.

Phillips, Farm & Ranch, Apr. 12, '13, 13.

Surface, Pa. D. A. Zoöl. I, 1, 51, 1911.

Surface, Pa. D. A. Zoöl. II, 5, 201, 1912.

Potato plant-louse, see Macrosiphum solanifolii**Potato stalk borer, see Trichobaris trinitata****Potato-stalk weevil, see Trichobaris trinitata****Potato tuber moth, see Phthorimaea operculella****Potherb butterfly, see Pontia napi****Poultry disinfectant**

——— U. S. D. A. Ins. & Fung. Bd., Ins. 2, p. 28, 1914.

Poultry Insects

Banks, U. S. C. 92, 1907.

Bell, U. S. F. B. 287, 47, 1907.

Bentley, Tenn. Bd. Ent. f. 1913, 31.

Britton, Conn. Farm., Sept. 9, 1905, 13.

Brown, Nat'l Stockm. & Farm., Apr. 26, 1913, 20.

Drake, South. Cult., June 15, 1907, 25.

Elpers, Farm. Guide, July 15, 1911, 16.

Ewing, Oreg. B. 92, 1913.

Gary, South. Plant., Nov. 1911, 1190.

Gee, Prog. Farm., Mar. 16, 1912, 368.

Geer, Farm & Ranch, May 31, 1913, 17.

Halpin, Mich. B. 245, 239, 1907.

Halpin, Amer. Cult., June 1, 1907, 16.

Herrick, J. Ec. Ent. VI, 81, 1913.

Jones, Farm & Ranch, Sept. 9, 1906, 14.

Kaupp, Farm. Guide, Oct. 7, 1911, 27.

Kaupp, Colo. B. 185, 1912.

Knabe, South. Plant., Mar. 1912, 378.

Koethen, Cal. Cult., XLI, 267, 1913.

Lamon, U. S. F. B. 528, 11, 1913.

Pierce, Farm. Guide, Dec. 4, 1909, 18.

Popenoe, Kans. Farm., Aug. 16, '06, 857.

Salmon, U. S. F. B. 530, 5, 1913.

Schoppe, Conn. Farm., Aug. 31, '12, 8.

Surface, Pa. D. A. Zoöl. I, 1, 52, 1911.

Tormohlen, Farm. Guide, July 11, 1908, 16.

Winslow, Farm & Ranch, Oct. 10, 1908, 14.

——— Conn. Farm., July 18, 1914, 6.

——— Nor'-West Farm., May 20, 1905, 479.

——— Rur. N. Y., 1905, 547.

Poultry mite, see Dermanyssus gallinae**Praon cerasaphis**

Gibson, Ont. Ent. Soc. R. 41, 16, 1911.

- Prays citri**
 Essig, Cal. Hort. B. II, 11, 722, 1913.
 Quayle, U. S. D. A. B. 134, 22, 1914.
- Premnotypes solani**
 Marlatt, U. S. Fed. Hort. Bd. R. 8, 1914.
- Prenolepis imparis**
 Forbes, Ill. Ent. R. 23, 158, 1905.
 Hunter & Pierce, U. S. B. 114, 140, 1912.
 Pierce, U. S. B. 100, 73, 1912.
 Vickery, U. S. B. 85, 116, 1910.
- Pretty cutworm, see Mamestra legitima**
- Prionoxystus macmurtrei**
 Felt, N. Y. St. Mus. Mem. 8, 439, 1906.
- Prionoxystus robiniae**
 Childs, Cal. Hort. B. III, 7, 259, 1914.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 12, 1906.
 Felt, N. Y. St. Mus. Mem. 8, 79, 1905.
 Gillette, U. S. B. 52, 59, 1905.
 Hopkins, U. S. B. 58, 61, 1909.
- Prionoxystus spp.**
 Hopkins, U. S. C. 126, 2, 1910.
- Prionus californica**
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 195.
 ——— Pac. Rur. Press, LXXVIII, 3, 1909.
- Prionus imbricornis**
 Smith, N. C. B. 206, 83, 1910.
- Prionus laticollis**
 Essig, Cal. Hort. B. II, 1-2, 233, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 486, 1906.
 Smith, N. C. B. 206, 83, 1910.
 Smith, N. J. R., 1910, 348.
 Symons, Md. B. 101, 151, 1905.
- Prionus sp.**
 O'Kane, Inj. Ins. 232, 1914.
- Priophorus acericaulis**
 Britton, Ent. News, 1906, 313.
 Britton, Conn. R. 6, 295, 1907.
 Britton, Conn. R. 10, 708, 1911.
 Britton, Conn. R. 11, 305, 1912.
 Fernald, J. Ec. Ent. V, 247, 1912.
 Fernald, Mass. R. 24, I, 83, 1912.
 ——— U. S. Y. B., 1906, 514.
- Pristiphora bivittata**
 Davis, J. Ec. Ent. III, 185, 1910.
- Pristiphora grossulariae**
 Baldwin, Ind. Ent. R. 5, 126, 1912.
 Cooley, Mont. B. 64, 42, 1906.
 Gillette, Colo. B. 114, 23, 1906.
 Gillette, Better Fr., Feb. 1910, 23.
- Gossard, O. Farm., Apr. 16, 1910, p. 538.
 Moore, Wis. B. 190, 29, 1910.
 O'Kane, Inj. Ins., 286, 1914.
 Sanderson, Ins. Pests, 487, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 344, 1914.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 15.
 Swenk, Nebr. Hort. Soc., 1909, 91.
- Pristiphora sycophanta**
 Felt, N. Y. St. Mus. Mem. 8, 557, 1906.
- Pristomeridia agilis**
 Brooks, W. Va. R. f. 1909-1910, 142.
 Brooks, W. Va. B. 126, 116, 1910.
- Pristomerus texanus**
 Sanderson, U. S. B. 57, 36, 1906.
- Pristomerus vulnerator**
 Quaintance, U. S. Y. B., 1907, 443.
- Prociphilus, see Pemphigus**
- Proctacanthus milbertii**
 Wildermuth, U. S. D. A. B. 124, 26, 1914.
- Prodenia commeliniae**
 Sherman, N. C. Dept. Agr. B. 35, 5, 17, 1914.
- Prodenia eridania**
 Chittenden, U. S. B. 66, 53, 1909.
 Sanderson, U. S. B. 57, 44, 1906.
 Watson, Fla. B. 112, 36, 1912.
 Watson, Fla. B. 125, 1914, 75.
 ——— U. S. Y. B., 1907, 545.
- Prodenia ornithogalli**
 Forbes, Ill. Ent. R. 23, 79, 1905.
 Quaintance & Brues, U. S. B. 50, 105, 1905.
 Sanborn, Okla. B. 100, 64, 1912.
 Sanderson, U. S. F. B. 223, 15, 1905.
 Sanderson, U. S. B. 57, 42, 1906.
 Sanderson, Ins. Pests, 258, 1912.
 ——— U. S. Y. B., 1905, 631.
 ——— U. S. Y. B., 1908, 570.
- Prodenia sp.**
 ——— U. S. Y. B., 1906, 512.
- Prodiplosis fitchii**
 Felt, J. Ec. Ent. V, 288, 1912.
- Profenusa collaris**
 Parrott, Pr. West. N. Y. Hort. Soc., 57, Meet., 122, 1912.
 Parrott, J. Ec. Ent. VI, 62, 1913.
- Proliferation and cotton weevil**
 Hinds, U. S. B. 59, 1906.
- Prospalta see Prospaltella**

- Prospaltella aurantii**
 Essig, Cal. Hort. B. II, 1-2, 276, 1913.
 Marlatt, U. S. B. 62, 60, 1906.
 Morrill & Back, U. S. B. 102, 8, 1912.
 Quaintance, U. S. C. 124, 10, 1910.
 Quayle, Cal. B. 222, 136, 1911.
 Quayle, J. Ec. Ent. IV, 511, 1911.
 Taylor, Colo. B. 120, 10, 1907.
 Taylor, U. S. B. 67, 90, 1907.
- Prospaltella citrella**
 Morrill & Back, U. S. B. 102, 8, 1912.
- Prospaltella lahorensis**
 Howard, U. S. R. Ent., 1911, 11.
 Morrill & Back, U. S. B. 102, 8, 1912.
 Woglum, U. S. B. 120, 38, 1913.
- Prospaltella murtfeldtii**
 Smyth, Kans. Hort. Soc., 1910, 65.
 Smyth, Kans. Hort. Soc., 1911, 170.
- Prospaltella perniciosi**
 Felt, N. Y. Fr. Grow. Assoc., 1914, 164.
 Fernald, Ent. News, 1914, 39.
 Tower, Ann. Ent. Soc. Am. VI, 125, '13.
 Tower, J. Ec. Ent. VII, 422, 1914.
- Proteopteryx deludana**
 Chittenden, Nut Grow., June, '05, 164.
 Chittenden, Nut Grow., Jan., '06, 106.
 Chittenden, Nut Grow., Sept., 1907, 4.
 Gossard, Fla. B. 79, 285, 1905.
 Herrick, Tex. B. 124, 10, 1909.
 Williams, Ala. Poly. B. 155, 46, 562, 1911.
 Worsham, Ga. Bd. Ent. B. 33, 118, 1910.
 Worsham, Ga. Hort. Soc., 1910, 118.
 ——— U. S. Y. B., 1905, 636.
 ——— U. S. Y. B., 1907, 549.
 ——— U. S. Y. B., 1908, 579.
- Proteopteryx willingana**
 Washburn, Minn. Ent. R. 13, 109, 1910.
- Proteoteras aesculanum**
 Washburn, Minn. R. 12, 97, 1908.
 Washburn, Minn. Ent. R. 13, 133, 1910.
- Protoparce**, *see* **Phlegethontius**
- Proxys punctulatus**
 Sanderson, U. S. B. 57, 49, 1906.
- Prune insects**
 Cordley, Better Fr., Aug., 1912, 10.
- Pruning in relation to insects**
 Shaw, Ohio Nurs. Orch. Insp. B. 12, '12.
- Psallus delicatus**
 Morrill, U. S. B. 86, 92, 1910.
- Psenocerus supernotatus**
 Gossard, Ohio B. 164, 25, 1905.
- Grossenbacher & Duggar, N. Y. St. Tech. B. 18, 120, 1911.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 15.
 Swaine, Ont. Ent. Soc. R. 41, 96, 1911.
- Pseudanaphora arcanela**
 Forbes, Ill. Ent. R. 23, 44, 95, 1905.
- Pseudanthonomus crataegi**
 Brooks, W. Va. R. f. 1909-1910, 142.
 Brooks, W. Va. B. 126, 117, 1910.
 Slingerland & Crosby, Man. Fr. Ins. 38, 1914.
- Pseudanthonomus validus**
 Cooley, J. Ec. Ent. VII, 193, 1914.
 Cooley, Mont. B. 98, 127, 1914.
- Pseudaonidia duplex**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 212, 1907.
- Pseudapanteles etiellae**
 Hyslop, U. S. B. 95, 104, 1912.
- Pseudococcus aceris**, *see* **Phenacoccus acericola**
- Pseudococcus adonidum**, *see* **P. longispinus**
- Pseudococcus affinis**
 Essig, Cal. Hort. B. III, 3, 106, 1914.
- Pseudococcus agrifoliae**
 Essig, Cal. Hort. B. III, 3, 106, 1914.
- Pseudococcus artemisiae**
 Essig, Cal. Hort. B. II, 1-2, 96, 1913.
 Essig, Cal. Hort. B. III, 3, 107, 1914.
- Pseudococcus aurilanus**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 175, 1907.
 Essig, Cal. Hort. B. II, 1-2, 97, 1913.
 Essig, Cal. Hort. B. III, 3, 108, 1914.
- Pseudococcus azaleae**
 Essig, Cal. Hort. B. III, 3, 108, 1914.
- Pseudococcus bakeri**
 Essig, Pom. Jr. Ent. II, 339, 1910.
 Essig, Cal. Cult., XXVI, 163, 1911.
 Essig, Cal. Hort. B. II, 1-2, 98, 1913.
 Essig, Cal. Hort. B. III, 3, 110, 1914.
 Vaile, Cal. Hort. B. II, 6, 554, 1913.
- Pseudococcus calceolariae**
 Garrett, La. R. 21, 22, 1909.
 Garrett, La. B. 121, 3, 1910.
 Holloway, U. S. C. 165, 7, 1912.
 Holloway, La. Plant., Dec. 20, 1913, 416.
 Holloway, U. S. C. 171, 4, 1913.
 Newell, J. Ec. Ent. I, 27, 1908.
 Newell & Barber, U. S. B. 122, 23, 65, 1913.

- O'Kane, Inj. Ins. 115, 1914.
 Rosenfeld, J. Ec. Ent. III, 213, 1910.
 Titus, U. S. B. 52, 81, 1905.
 Van Dine, La. Plant., May 14, 1910, 421.
 ——— La. Plant., Sept. 24, 1910, 206.
- Pseudococcus citri**
 Allen, Claremont (Cal.) Pom. Club B. 1, 11, 1909.
 Allen, Cal. Cult., XXXIV, 231, 1910.
 Bemis, Claremont (Cal.) Pom. Club B. 1, 17, 1909.
 Berger, Fla. R., 1907, XXXVIII.
 Blanchard, Claremont (Cal.) Pom. Club B. 1, 10, 1909.
 Bremner, Cal. Hort. Comm. Destr. Ins. 1910, 32.
 Britton, Conn. B. 151, 6, 1905.
 Britton, Conn. R. 5, 236, 1906.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 175, 1907.
 Douglass, Ind. Ent. R. 4, 157, 1912.
 Essig, Pom. Jr. Ent. I, 89, 1909.
 Essig, Cal. Cult., XXXIV, 164, 235, 1910.
 Essig, Pom. Jr. Ent. II, 246, 289, 1910.
 Essig, Cal. Cult., XXXVI, 36, 1911.
 Essig, Ventura Co. (Cal.) Hort. Comm. B. 2, 1911.
 Essig, Cal. Hort. B. II, 1-2, 99, 1913.
 Essig, Cal. Hort. B. III, 3, 111, 1914.
 Gahan, Md. B. 119, 2, 1907.
 Hoyt, Cal. Hort. B. I, 6, 231, 1912.
 Maskew, Claremont (Cal.) Pom. Club B. 1, 18, 1909.
 Matheson, Can. Ent., 1907, 284.
 Newell & Barber, U. S. B. 122, 24, 1913.
 Pease, Cal. Cult., XXX, 108, 1908.
 Prizer, Cal. Cult., XLII, 357, 1914.
 Quayle, Cal. B. 214, 481, 1911.
 Quayle, U. S. D. A. B. 134, 21, 1914.
 Rosenfeld, J. Ec. Ent. III, 215, 1910.
 Sanders, J. Ec. Ent. II, 432, 1909.
 Smith, Claremont (Cal.) Pom. Club B. 1, 6, 1909.
 Smith, Cal. Hort. B. III, 1, 26, 1914.
 Smith & Allen, Cal. Cult., XXXII, 243, 1909.
 Surface, Pa. D. A. Zoöl. III, 1, 25, 1913.
 Titus, U. S. B. 52, 80, 1905.
 Vaile, Pac. Rur. Press, LXXXIV, 624, 1912.
 Vaile, Cal. Cult., XL, 260, 1913.
- Woglum, U. S. B. 90, 10, 63, 1912.
 Woodworth, Cal. Cult., XLII, 134, 1914.
 ——— Cal. Cult., XXX, 61, 1908.
- Pseudococcus citri, eggs**
 Davis, Ent. News, 1908, 383.
- Pseudococcus citri, parasite of**
 Carnes, Claremont (Cal.) Pom. Club. B. 1, 13, 1909.
- Pseudococcus crawii**
 Essig, Cal. Hort. B. II, 1-2, 105, 1913.
 Essig, Cal. Hort. B. III, 3, 117, 118, '14.
- Pseudococcus dudleyi**
 Essig, Cal. Hort. B. III, 3, 118, 1914.
- Pseudococcus ephedrae**
 Essig, Cal. Hort. B. III, 3, 118, 1914.
- Pseudococcus longispinus**
 Britton, Conn. B. 151, 6, 1905.
 Britton, Conn. R. 5, 236, 1906.
 Carnes, Cal. Hort. Comm. Bien. R. 2, 176, 1907.
 Douglass, Ind. Ent. R. 4, 159, 1912.
 Essig, Cal. Hort. B. II, 1-2, 105, 1913.
 Essig, Cal. Hort. B. III, 3, 118, 1914.
 Gahan, Md. B. 119, 4, 1907.
 Harney, Cal. Hort. Comm. C. Nov., 13, 1905.
 Sanderson, J. Ec. Ent. II, 431, 1909.
 Surface, Pa. D. A. Zoöl. III, 1, 25, 1913.
- Pseudococcus maritimus**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 177, 1907.
 Essig, Cal. Hort. B. III, 3, 120, 1914.
- Pseudococcus nipae**
 Essig, Cal. Hort. B. II, 1-2, 106, 1913.
- Pseudococcus obscurus**
 Essig, Cal. Hort. B. III, 3, 120, 1914.
- Pseudococcus pseudonipae**
 Douglass, Ind. Ent. R. 4, 160, 1912.
 Essig, Cal. Hort. B. II, 1-2, 107, 1913.
 Essig, Cal. Hort. B. III, 3, 120, 1914.
- Pseudococcus quercus**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 177, 1907.
 Essig, Cal. Hort. B. III, 3, 121, 1914.
- Pseudococcus ryani**
 Carnes, Cal. Hort. Comm. Bien. R. 2, 178, 1907.
 Essig, Cal. Hort. B. III, 3, 121, 1914.
- Pseudococcus sacchari**
 Holloway, U. S. C. 165, 5, 1912.
- Pseudococcus salinus**
 Essig, Cal. Hort. B. III, 3, 121, 1914.

- Pseudococcus sequoiae**
Essig, Cal. Hort. B. III, 3, 121, 1914.
- Pseudococcus solani**
Essig, Cal. Hort. B. III, 3, 122, 1914.
- Pseudococcus sp.**
Chittenden, Ins. Inj. Veg., 243, 1907.
Douglass, Ind. Ent. R. 1, 84, 1908.
Essig, Pom. Jr. Ent. I, 37, 1909.
Newell, La. Crop Pest Comm. C. 13, 9, 1907.
Pease, Cal. Hort. Comm. C. Nov. '05, 9.
Watson, Fla. Grow., July 19, 1913, 11.
- Pseudococcus trifolii**
Folsom, Ill. B. 134, 189, 1909.
Folsom, Ill. Ent. R. 25, 117, 1909.
Forbes, Ill. B. 131, 3, 1908.
Gossard, Ohio B. 233, 82, 1911.
Pettit, Mich. B. 233, 157, 1906.
Pettit, Mich. B. 258, 290, 1910.
- Pseudococcus yerba-santae**
Essig, Cal. Hort. B. III, 3, 123, 1914.
- Pseudoeucoela gillettei**
Washburn, U. S. B. 60, 89, 1906.
Washburn, U. S. B. 67, 15, 1907.
Washburn, Minn. B. 12, 131, 1908.
- Pseudohazis eglanterina**
Bremner, Cal. Hort. Comm. Destr. Ins., 1910, 8.
Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 226, 1907.
Essig, Cal. Hort. B. II, 1-2, 183, 1913.
- Pseudophilippia quaintancii**
Felt, N. Y. St. Mus. Mem. 8, 689, 1906.
- Pseudopyrellia cornicina**
Girault, Jr. N. Y. Ent. Soc. XVI, 15, '08.
Washburn, Minn. P. B. 22, 22, 1905.
- Pseudoweisea suturalis**
Marlatt, U. S. B. 62, 64, 1906.
- Psila rosae**
Bethune, Ont. Agr. Coll. B. 171, 20, '09.
Bethune, Ont. Agr. Coll. R. 35, 29, 1910.
Chittenden, Ins. Inj. Veg., 177, 1907.
Fletcher, Can. Exp. Farms B. 52, 43, '05.
Fletcher, Ont. Ent. Soc. R. 35, 51, 1905.
Fletcher, Ont. Ent. Soc. R. 36, 86, 1906.
Johannsen, Me. B. 187, 5, 1911.
Lochhead, Ont. Ent. Soc. R. 35, 29, 1905.
Lochhead, Syn. Ec. Ent. 90, 1914.
Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 12, 1906.
O'Kane, Inj. Ins. 122, 1914.
Pettit, Mich. R. 53, 232, 1914.
- Sanderson, Ins. Pests, 415, 1912.
Swaine, Ont. Ent. Soc. R. 41, 96, 1911.
- Psilocephala melampodia**
Felt, N. Y. R. 27, 121, 1912.
- Psilopodinus flaviceps**
Dean, J. Ec. Ent. III, 207, 1910.
Dean, U. S. B. 85, 57, 1911.
- Psorophora ciliata**
Coffin, Md. B. 109, 107, 1906.
Sellards, Fla. R., 1905, 24.
- Psoroptes communis**
Davis, Iowa Agric., Apr. 1910, 305.
Doane, Ins. Disease, 37, 1910.
Good, Ky. B. 143, 220, 1909.
Hall, U. S. B. An. Ind. R., 1910, 456.
Hermes, Cal. Cult., XLI, 265, 1913.
O'Kane, Inj. Ins. 376, 1914.
- Psoroptes equi**
Law, U. S. B. An. I. R., 1907, 452.
- Psoroptes ovis**
Fischer, Ohio Bd. Agr. R. 61, 715, 1906.
Hermes, Cal. Cult., XLI, 290, 1913.
Washburn, Minn. P. B. 22, 17, 1905.
Wing, Pa. Dept. Agr. B. 140, 29, 1906.
- Psychoda alternata**
Felt, N. Y. R., 25, 14, 1910.
- Psychoda minuta**
Herrick, Household Ins. 50, 1914.
- Psylla floccosa**
Johannsen, Me. B. 177, 29, 1910.
Patch, Me. B. 187, 11, 1911.
- Psylla galeaformis**
Patch, Me. B. 187, 12, 1911.
- Psylla pyricola**
Baldwin, Ind. Ent. R. 5, 94, 1912.
Bethune, Ont. Agr. Coll. B. 158, 19, '07.
Britton, Conn. R. 4, 213, 1905.
Britton, N. Y. Fr. Grow. Assoc., '07, 154.
Caesar, Ont. Agr. Coll. B. 198, 22, 1912.
Caesar, Ont. Ent. Soc. R. 42, 30, 1912.
Caesar, Ont. Ent. Soc. R. 43, 79, 1913.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 63, 1913.
Ehrhorn, Cal. Fr. Grow., Dec. 12, 1908, 12.
Ehrhorn, Pac. Rur. Press, LXXVI, 372, 1908.
Essig, Cal. Hort. B. II, 1-2, 43, 1913.
Felt, U. S. B. 52, 51, 1905.
Felt, N. Y. R. 26, 45, 1911.
Felt, N. Y. Fr. Grow. Assoc., 1914, 23.
Fisher, Can. Ent., 1905, 1.

- Fulton, Wright & Gregg, Pa. B. 110, 33, 1911.
- Funk, Pa. Dept. Agr. B. 152, 247, 1907.
- Gossard, Ohio B. 164, 20, 1905.
- Gossard, Ohio B. 198, 53, 1908.
- Gossard, Ohio B. 233, 114, 1911.
- Haseman, Mo. Hort. Soc., 1911, 253.
- Hodgkiss, J. Ec. Ent. VI, 243, 1913.
- Hodgkiss, N. Y. Fr. Grow. Assoc., 1914, 222.
- Hodgkiss, N. Y. St. B. 387, 389, 1914.
- Jarvis, Conn. Storrs B. 56, 262, 1909.
- Lochhead, Syn. Ec. Ent., 47, 1914.
- O'Kane, Inj. Ins. 313, 1914.
- Parrott, N. Y. Fr. Grow. Assoc., '10, 34.
- Parrott, Pr. N. Y. Fr. Grow. Assoc., 9 East. Meet., 4, 1911.
- Parrott, Pr. N. Y. Fr. Grow. Assoc., 10 Meet., 34, 1911.
- Parrott, N. Y. Dept. Agr. B. 37, 1410, 1912.
- Parrott, Pr. N. Y. Fr. Grow. Assoc., 11 Meet., 52, 1912.
- Parrott, N. Y. Fr. Grow. Assoc., 1912, 4, 52, 55.
- Parrott, Pr. West. N. Y. Hort. Soc., 57 Meet., 124, 1912.
- Parrott, N. Y. Fr. Grow. Assoc., 1913, 44, 255.
- Parrott & Hodgkiss, J. Ec. Ent. V, 193, 1912.
- Parrott & Hodgkiss, N. Y. St. C. 20, '13.
- Patch, Me. B. 187, 11, 1911.
- Powell, Mass. Bd. Agr. R. 57, 309, 1910.
- Sanderson, Ins. Pests, 639, 1912.
- Slingerland & Crosby, N. Y. C. B. 252, 341, 1908.
- Slingerland & Crosby, Man. Fr. Ins. 218, 1914.
- Slingerland, Herrick & Crosby, N. Y. C. B. 283, 473, 1910.
- Smith, N. J. R., 1905, 539.
- Smith, N. J. R., 1906, 521.
- Smith, N. J. R., 1908, 320.
- Smith, N. J. R., 1909, 397.
- Smith, N. J. R., 1911, 423.
- Surface, Pa. D. A. Zool. V., 12, 394, 1908.
- Symons, Md. B. 101, 149, 1905.
- Van Buren & Husted, N. Y. Dept. Agr. B. 24, 479, 1911.
- U. S. Y. B., 1905, 633.
- U. S. Y. B., 1906, 512.
- Psylla striata**
Patch, Me. B. 187, 14, 1911.
- Psylliodes convexior**
Chittenden, U. S. B. 66, 81, 1909.
Forbes, Ill. Ent. R. 23, 191, 1905.
- Psylliodes punctulata**
Chittenden, Ins. Inj. Veg., 248, 1907.
Chittenden, U. S. B. 66, 71, 1909.
Essig, Cal. Hort. B. II, 1-2, 231, 1913.
Forbes, Ill. Ent. R. 23, 191, 1905.
Gibson, Can. Exp. Farms Ent. C. 2, 10, 1913.
O'Kane, Inj. Ins. 162, 1914.
Parker, U. S. B. 82, 33, 1910.
Quayle, Cal. Cult., XXXI, 175, 1908.
Quayle, J. Ec. Ent. I, 325, 1908.
Wilson, Pr. Ent. Soc. B. C., 2, 7, 1912.
——— U. S. Y. B., 1906, 511.
——— U. S. Y. B., 1908, 571.
- Psyllobora 20-maculata**
Britton, Conn. B. 181, 12, 1914.
Davis, J. Ec. Ent. I, 160, 1908.
- Psyllobora taedata**
Essig, Cal. Hort. B. II, 1-2, 210, 1913.
- Psyllopsis fraxinicola**
Felt, N. Y. R. 26, 39, 1911.
- Pterocyclon mali**
Hopkins, U. S. B. 58, 65, 1909.
Slingerland & Crosby, Man. Fr. Ins. 198, 1914.
- Pteromalus bimaculatus**
Gossard, Ohio B. 264, 30, 1913.
- Pteromalus cuproideus**
Howard & Fiske, U. S. B. 91, 305, 1911.
- Pteromalus egregius**
Britton, Conn. B. 182, 20, 1914.
Howard, U. S. R. Ent., 1907, 17.
Howard, U. S. R. Ent., 1911, 9.
Howard, Mass. For. R. 8, 89, 1912.
Howard, Mass. For. R. 9, 73, 1912.
Howard, U. S. R. Ent., 1912, 11.
Howard, Ann. Ent. Soc. Am. VII, 88, 1914.
Howard & Fiske, U. S. B. 91, 61, 262, *et seq.* 1911.
Johannsen, Me. B. 207, 457, 1912.
Tothill, Ont. Ent. Soc. R. 43, 58, 1913.
- Pteromalus eurymi**
Wildermuth, U. S. D. A. B. 124, 21, '14.
- Pteromalus nidulans**
Howard, U. S. R. Ent., 1907, 17.

Pteromalus processioneae

Howard, U. S. R. Ent., 1906, 10.

Pteromalus puparum

Chittenden, U. S. C. 60, 6, 1905.

Isaac, Bug vs. Bug, 21, 1906.

Johannsen, Me. B. 207, 458, 1912.

Sanderson, Ins. Pests, 358, 1912.

Pteromalus sp.

Howard, Mass. G. & B-T R. 4, 72, 1909.

Pteronius hudsonii

Felt, N. Y. St. Mus. Mem. 8, 569, 1906.

Pteronius integer

Felt, N. Y. St. Mus. Mem. 8, 683, 1906.

Pteronius latifasciatus

Felt, N. Y. St. Mus. Mem. 8, 572, 1906.

Pteronius mendicus

Felt, N. Y. St. Mus. Mem. 8, 561, 1906.

Pteronius odoratus

Felt, N. Y. St. Mus. Mem. 8, 562, 1906.

Pteronius ribesii

Baldwin, Ind. Ent. R. 5, 124, 1912.

Barre & Conradi, S. C. B. 141, 34, 1909.

Caesar, Ont. Dept. Agr., Fr. B. 22, 33, '14.

Chandler, Mo. Hort. Soc., 1909, 367.

Chandler, Mo. B. 102, 264, 1912.

Dean & Peairs, Kans. Agr. Educ. VI, 2, 107, 1913.

Douglass, Ind. Ent. R. 2, 122, 1910.

Fulton, Wright & Gregg, Pa. B. 110, 24, 1911.

Gibson, Ont. Ent. Soc. R. 40, 12, 1910.

Gossard, Ohio B. 198, 72, 1908.

Grant, Ont. Ent. Soc. R. 41, 18, 1911.

Hedrick, Mass. Bd. Agr. C. 14, 7, 1914.

Hitchings, Me. Ent. R. 5, 4, 1910.

Jarvis, Conn. Storrs B. 56, 252, 1909.

Lochhead, Syn. Ec. Ent. 98, 1914.

O'Kane, Inj. Ins. 285, 1914.

Price, Va. C. 7, 46, 1909.

Sanderson, Ins. Pests, 476, 1912.

Slingerland & Crosby, N. Y. C. B. 252, 343, 1908.

Slingerland & Crosby, Man. Fr. Ins. 341, 1914.

Slingerland, Herrick & Crosby, N. Y. C. B. 283, 471, 1910.

Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 15.

Surface, Pa. D. A. Zoöl. B. II, 10 and 11, 330, 1905.

Surface, Pa. D. A. Zoöl. V, 12, 381, 1908.

Surface, Pa. D. A. Zoöl. I, 4, 183, 1911.

Surface, Pa. D. A. Zoöl. III, 1, 11, 1913.

Symons, Md. B. 101, 156, 1905.

Troop, Ind. Farm., May 11, 1912, 6.

Weed, Nat'l Stockm. & Farm., May 24, 1913, 10.

Whiteside, Mont. Bd. Hort. f. 1907-1908, 38, 1909.

Wright, Green's Fr. Grow., June, '14, 8.

Young, Ont. Ent. Soc. R. 36, 8, 1906.

——— Iowa Home., June 15, 1905, 972.

——— Rur. N. Y., 1909, 140.

Pteronius thoracicus

Felt, N. Y. St. Mus. Mem. 8, 553, 1906.

Pteronius trilineatus

Cotton, Ohio Nurs. Orch. Insp. B. 7, 28, 1906.

Pteronius ventralis

Cory, Md. Hort. Soc., 1912, 192, 1913.

Felt, N. Y. St. Mus. Mem. 8, 322, 1905.

Garman, Ky. B. 120, 63, 1905.

Swenk, Nebr. Hort. Soc., 1909, 91.

Washburn, Minn. R. 12, 117, 1908.

Pteronius vertebratus

Felt, N. Y. St. Mus. Mem. 8, 570, 1906.

Pterophorus monodactylus

Gibson, Ont. Ent. Soc. R. 36, 122, 1905.

Symons, Md. B. 101, 179, 1905.

Pterostichus californicus

Quaintance, U. S. Y. B., 1907, 443.

Pterostichus coracinus

Washburn, U. S. B. 67, 15, 1907.

Pterostichus lucublandus

Chittenden, U. S. B. 82, 85, 1911.

Forbes, Ill. Ent. R. 23, 177, 1905.

Patch, Me. B. 148, 274, 1907.

Patch, Me. B. 161, 343, 1908.

Washburn, U. S. B. 67, 15, 1907.

Pterostichus permundus

Forbes, Ill. Ent. R. 23, 177, 1905.

Ptilinus pectinicornis

Herrick, Household Ins. 392, 1914.

Ptilinus ruficornis

Felt, N. Y. St. Mus. Mem. 8, 298, 1905.

Ptinus brunneus

Felt, N. Y. St. Mus. B. 129, 41, 1909.

Felt, N. Y. St. Mus. B. 136, 47, 1912.

Ptinus fur

Felt, N. Y. St. Mus. B. 129, 41, 1909.

Felt, N. Y. St. Mus. B. 136, 46, 1912.

Herrick, Household Ins. 393, 1914.

Johannsen & Patch, Me. B. 195, 233, '11.

——— U. S. Y. B., 1906, 516.

Pulex avium

Ewing, Oreg. Coll. B. 92, 14, 1913.

Kaupp, Colo. B. 185, 11, 1912.

Pulex cheopis*, see *Xenopsylla***Pulex gallinae*, see *Sarcopsylla gallinacea******Pulex irritans***Banks, Publ. Health Mar. Hosp. Serv.
B. 30, 73, 1910.

Doane, Ins. Disease, 154, 1910.

Fox, Publ. Health Mar. Hosp. Serv. B.
30, 142, 1910.

Herrick, Household, Ins., 144, 1914.

Howard, U. S. C. 108, 1909.

Howard, South. Plant., July 1913, 802.

Lochhead, Can. Ent., 1906, 66.

Lochhead, Syn. Ec. Ent. 95, 1914.

Mitzmain, Ent. News, 1908, 355.

Mitzmain, Publ. Health Mar. Hosp.
Serv., B. 38, 1910.Surface, Pa. D. A. Zool. III, 1, 21, 28,
1913.***Pulex serraticeps*, see *Ctenocephalus canis******Pulicides***

Rosenau, Prevent. Med., 240, 1913.

Pullus fuscatus

Smith, Cal. Hort. B. III, 1, 27, 1914.

Pulvinaria acericola

Douglass, Ind. Ent. R. 4, 160, 1912.

Felt, N. Y. St. Mus. Mem. 8, 179, 1905.

Howard, U. S. R. Ent., 1908, 31.

Smith, U. S. B. 67, 105, 1907.

Sanders, J. Ec. Ent. II, 435, 1909.

Pulvinaria amygdali

Essig, Cal. Hort. B. II, 1-2, 109, 1913.

Newell & Smith, U. S. B. 52, 69, 1905.

Smith, Ga. Bd. Ent. B. 17, 78, 1905.

Pulvinaria camelicolaCarnes, Cal. Hort. Comm. Bien. R. 2,
180, 1907.***Pulvinaria floccifera***

Morrison, Ind. Ent. R. 6, 74, 1914.

Pulvinaria innumerabilis*, see *vitis***Pulvinaria occidentalis***Cunningham, Pr. Ent. Soc. B. C., 1, 20,
1911.***Pulvinaria psidii***

Berger, Fla. R. 1908, lix.

Carnes, Cal. Hort. Comm. Bien. R. 2,
180, 1907.

Howard, U. S. R. Ent., 1911, 32.

Marlatt, J. Ec. Ent. V, 76, 1912.

Watson, Fla. R. 1912, LXIII.

——— U. S. Y. B., 1908, 577.

Pulvinaria pyriformis

Howard, U. S. R. Ent., 1907, 31.

Pulvinaria rhoisCarnes, Cal. Hort. Comm. Bien. R. 2,
181, 1907.***Pulvinaria vitis***

Barre & Conradi, S. C. B. 141, 37, 1909.

Bentley, Tenn. B. XIX, 2, 33, 1906.

Bethune, Ont. Ent. Soc. R. 36, 10, 1906.

Bethune, Ont. Agr. Coll. R. 32, 45, 1907.

Bethune, Ont. Ent. Soc. R. 40, 64, 1910.

Britton, Conn. B. 151, 6, 1905.

Britton, Conn. R. 5, 237, 1906.

Britton, Conn. R. 13, 252, 1914.

Brues, Wis. R. 22, 315, 1905.

Brues, Wis. Hort. Soc. R. f. 1906, 15.

Carnes, Cal. Hort. Comm. Bien. R. 2,
179, 1907.

Chalmers, S. Dak. R. f. 1905, 26.

Cotton, Ohio Nurs. Orch. Insp. B. 7, 34,
1906.

Dickerson, U. S. B. 67, 48, 1907.

Douglass, Ind. Ent. R. 1, 67, 1908.

Douglass, Ind. Farm., July 11, 1908, 9.

Douglass, Ind. Ent. R. 2, 110, 1910.

Douglass, Ind. Ent. R. 4, 166, 1912.

Ehrhorn, Pac. Rur. Press, LXXVI, 372,
1908.

Essig, Cal. Hort. B. II, 1-2, 110, 1913.

Felt, N. Y. St. Mus. Mem. 8, 196, 1905.

Felt, N. Y. R. 21, 97, 1906.

Felt, N. Y. Fr. Grow. Assoc., 1906, 121.

Fernald, Mass. B. 125, 57, 1908.

Fernald, J. Ec. Ent. V, 246, 1912.

Fernald, Mass. R. 24, I, 82, 1912.

Forbes, Ill. B. 112, 343, 1907.

Forbes, Farm. Guide, June 22, 1907, 16.

Forbes, Ill. Ent. R. 24, 100, 1908.

Forbes, Ill. B. 151, 524, 1911.

Forbes, Ill. Ent. R. 26, 62, 1911.

Garcia, N. Mex. B. 68, 42, 1908.

Gillette, U. S. B. 52, 59, 1905.

Gillette, Colo. B. 114, 22, 1906.

Gossard, Fla. B. 79, 313, 1905.

Gossard, Ohio B. 233, 143, 1911.

Green, Minn. Hort. Soc., 1905, 367.

Houser, Ohio B. 194, 177, 1908.

Howard, U. S. R. Ent., 1905, 292.

Howard, U. S. R. Ent., 1906, 24.

Howard, U. S. R. Ent., 1907, 31.

Howard, U. S. R. Ent., 1908, 31.

Pulvinaria vitis (*Cont'd*)

- Jarvis, Ont. Ent. Soc. R. 37, 54, 1907.
 Jarvis, Ont. Ent. Soc. R. 38, 67, 1908.
 Jarvis, Conn. Storrs B. 56, 257, 1909.
 Jeffrey, Cal. Hort. Comm. Bien. R. 2, 284, 1907.
 Johannsen, Me. B. 207, 446, 1912.
 Johnson, U. S. B. 52, 85, 1905.
 Johnson, Colo. B. 116, 3, 1906.
 Johnson, Colo. P. B. 27, 1906.
 Johnson, Farm & Fireside, Mar. 25, 1907, 9.
 Johnson, Farm. Guide, Oct. 1, 1910, 5.
 Lochhead, Ont. Ent. Soc. R. 36, 137, 1906.
 Lochhead, Syn. Ec. Ent. 43, 1914.
 Martin, Iowa Agric., Jan., 1906, 175.
 Moore, Wis. R. 23, 233, 1906.
 Moore, Wis. R. 24, 276, 1907.
 O'Kane, Inj. Ins. 260, 1914.
 Price, Va. C. 7, 77, 1909.
 Russell, Wis. B. 240, 43, 1914.
 Sanders, U. S. C. 64, 1, 1905.
 Sanders, J. Ec. Ent. I, 17, 1908.
 Sanders, J. Ec. Ent. II, 433, 1909.
 Sanders, Wis. B. 227, 18, 1912.
 Sanders, Farm. Guide, May 16, '14, 21.
 Slingerland & Crosby, Man. Fr. Ins. 427, 1914.
 Smith, N. J. B. 181, 12, 1905.
 Smith, N. J. R., 1905, 591.
 Smith, Nebr. Hort. Soc., 1906, 243.
 Smith, U. S. B. 67, 36, 105, 1907.
 Smith, Nebr. Hort. Soc. B. 20, 14, 1908.
 Smith, N. J. R., 1910, 346.
 Surface, Pa. D. A. Zoöl. I, 4, 174, 1911.
 Taylor, Mo. Fr. Exp. Sta. B. 18, 86, '08.
 Washburn, U. S. B. 52, 57, 1905.
 Washburn, Minn. R. 11, 22, 54, 1906.
 Washburn, U. S. B. 60, 85, 1906.
 Washburn, Minn. R. 12, 103, 1908.
 Weed, U. S. B. 52, 68, 1905.
 Wicks, Deseret Farm., July 15, 1911, 15.
 ——— C. Gentl., 1910, 703.
 ——— Ind. Farm., July 7, 1906, 14.
 ——— Prai. Farm., Jan. 15, 1914, 24.
 ——— U. S. Y. B., 1905, 635.
 ——— U. S. Y. B., 1906, 514.
 ——— U. S. Y. B., 1907, 551.

Pulvinaria vitis, eggs

Davis, Ent. News, 1906, 368.

Pumpkin-bug, *see* **Nezara hiliaris****Punctured flea-beetle**, *see* **Psylliodes punctulata****Punkies**, *see* **Ceratopogon****Pure Insecticides**

——— Cal. Fr. Grow., Dec. 25, 1909, 7.

Pure lead arsenate (Hemingway's)

——— U. S. D. A. Ins. & Fung. Bd.,
 Ins. 1, p. 16, 1914.

Purified cyanide

——— U. S. D. A. Ins. & Fung. Bd. Ins.
 1, p. 12, 1914.

Purple apple aphid, *see* **Aphis sorbi****Purple scale**, *see* **Lepidosaphes beckii****Purslane bug**, *see* **Geocoris bullatus****Putnam's scale**, *see* **Aspidiotus ancyclus****Pycnoderes quadrimaculatus**

Morrill, J. Ec. Ent. VI, 190, 1913.

Pyralis farinalis

Chittenden, U. S. B. 64, 40, 1908.

Cooley, Mont. B. 92, 59, 1912.

Dean, Kans. Agr. Educ. I, 4, 63, 1909.

Dean, Kans. B. 189, 220, 1913.

Dietz, Ind. Ent. R. 6, 86, 1914.

Felt, N. Y. St. Mus. B. 129, 37, 1909.

Felt, N. Y. St. Mus. B. 136, 42, 1912.

Girault, Ill. B. 156, 76a, 1912.

Girault, Ill. Ent. R. 27, 66a, 1912.

Gossard, Ohio B. 233, 85, 1911.

Herrick, Household Ins. 256, 1914.

O'Kane, Inj. Ins. 362, 1914.

Parker, U. S. D. A. B. 15, 2, 1913.

Pettit, Mich. B. 251, 287, 1908.

Sanderson, Ins. Pests, 192, 1912.

Smith, N. C. B. 203, 19, 1909.

Surface, Pa. D. A. Zoöl. III, 1, 19–20,
 1913.

Pyrethrum

Harcourt & Fulmer, Ont. Agr. Coll. B.
 154, 25, 1907.

Morris & Parker, Mont. C. 36, 249, '14.

Smith, N. J. B. 213, 29, 1908.

Stone & Fernald, Mass. B. 123, 11, 1908.

Taft, Mich. Hort. Soc., 1908, 145, 1909.

Pyrgota undata

Davis, U. S. F. B. 543, 14, 1913.

Forbes, Ill. B. 116, 474, 1907.

Forbes, Ill. Ent. R. 24, 162, 1908.

Pyrofume

Francis, Pub. Health R. XXI, 711, 1906.

Francis, Pub. Health R. XXII, pt. 1,
 467, 1907.

Howard, U. S. B. 88, 34, 1910.

Pyrol tree and plant spray

Smith, N. J. R., 1904, 647, 1905.

Pyrophila pyramidoides

Britton, Conn. R. 8, 848, 1909.

Pyrox

Chase, Ga. Bd. Ent. B. 32, 21, 1910.

Pyrrharcia isabella, see Isia**Pyrrhia umbra**

Gibson, Ont. Ent. Soc. R. 36, 119, 1906.

Gibson, Ont. Ent. Soc. R. 43, 17, 1913.

Gibson, Ont. Ent. Soc. R. 44, 18, 1914.

Felt, N. Y. St. Mus. Mem. 8, 368, 1906.

Quarantine

Carnes, Cal. Hort. Comm. Bien. R. I. 344, 1905.

Cook, Cal. Cult., XXXVII, 610, 1911.

Cook, Cal. Hort. Comm. Statutes, '12, 15.

Cook, Cal. Hort. B. III, 3, 156, 1914.

Ehrhorn, Pac. Rur. Press, LXXI, 52, 1906.

Ehrhorn, Cal. Hort. Comm. Bien. R. 3, 19, 1909.

Essig, Ventura Co. (Cal.) Hort. Comm. B. 2, 1911.

Essig, Cal. Hort. I., 1, 17, 1911.

Hoyt, Cal. Hort. B. I, 7, 321, 1912.

Hoyt, Cal. Hort. B. I, 10, 808, 1912.

Hoyt, Cal. Hort. B. II, 5, 541, 1913.

Marlatt, J. Ec. Ent. IV, 107, 1911.

Marlatt, J. Ec. Ent. VI, 133, 1913.

Maskell, Cal. Cult., XXXVIII, 3, 1912.

Maskew, Cal. Cult., XXXVIII, 104, '12.

Maskew, Cal. Hort. B. I, 3, 107, 1912.

Maskew, Cal. Hort. B. I, 4, 135, 1912.

Maskew, Cal. Hort. B. I, 5, 199, 1912.

Maskew, Cal. Hort. B. I, 7, 320, 1912.

Maskew, Cal. Hort. B. II, 3-4, 400, '13.

Maskew, Cal. Hort. B. II, 6, 572, 1913.

Maskew, Cal. Hort. B. II, 7, 599, 1913.

Maskew, Cal. Hort. B. II, 9, 671, 1913.

Maskew, Cal. Hort. B. II, 10, 707, 1913.

Maskew, Cal. Hort. B. II, 11, 733, 1913.

Maskew, Cal. Hort. B. III, 8, 309, 1914.

Morrill, Cal. Cult., XXVII, 547, 1911.

Morrill, S. W. Stockm., Sept. 18, 1914, 10.

Pease, Cal. Fr. Grow., Dec. 13, 1913, 9.

Watson, Fla. Grow., Nov. 22, 1912, 26.

Woodworth, J. Ec. Ent. II, 359, 1909.

Worsham, Fr. Ga. Hort. Soc. f. '12, 39.

—— Cal. Cult. XXIX, 578, 1912.

—— Cal. Hort. Comm. Bien. R. 6, 18, 1914.

—— Oreg. Bd. Hort. 8th Bien. R. 83.

—— Oreg. Bd. Hort. 10th Bien. R., 137.

—— Oreg. Bd. Hort. 11th Bien. R., 166.

—— Tenn. Bd. Ent. B. 6, 66, 1912.

—— U. S. D. A. Off. Secy. C. 41, 1914.

Quarantine, *see also* Legislation, *quarantine*

Quassia as insecticide

Parker, U. S. D. A. B. 165, 1, 1914.

Quedius molochinus

Chittenden, U. S. C. 87, 11, 1907.

Quince curculio, *see* Conotrachelus crataegi

Rachela bruceata

Slingerland & Crosby, Man. Fr. Ins. 93, 1914.

Railroad worm, *see* Rhagoletis pomonella

Raspberry byturus, *see* Byturus unicolor

Raspberry cane-borer, *see* Oberea bima-culata

Raspberry cane-maggot, *see* Phorbia rubivora

Raspberry crown moth, *see* Sesia rutilans

Raspberry horntail, *see* Hartigia cressoni

Raspberry insects

Clement, Ont. Dept. Agr. Fr. B. 210, 28, 1913.

Lawrence, Better Fr., Dec. 1912, 16.

Surface, Pa. D. A. Zoöl. I, 1, 54, 1911.

Raspberry leaf-roller, *see* Exartema permundana

Raspberry root-borer, *see* Bembe-cia marginata

Raspberry sawfly, *see* Monophadnoides rubi

Raspberry span-worm, *see* Synchrona aerata

Rat Bis-Kit Paste

—— U. S. D. A. Ins. & Fung. No. 41, 1914.

Rat flea, *see* Xenopsylla cheopis

Rat parasites

Banks, Publ. Health Mar. Hosp. Serv. B. 30, 69, 1910.

Stiles & Hassall, Publ. Health Mar. Hosp. Serv. B. 30, 111, 1910.

Records, *keeping*

Hinds & Bishopp, J. Ec. Ent. I, 91, 1908.

Townsend, J. Ec. Ent. IV, 249, 1911.

- Recurvaria nanella*
 Scott & Paine, J. Agr. Res. II, 161, 1914.
- Recurvaria piceaella*
 Johannsen, Me. B. 210, 32, 1913.
- Recurvaria thujaella*
 Fletcher, Ont. Ent. Soc. R. 37, 86, 1907.
- Red-banded leaf-roller, *see* *Eulia triferana*
- Red bug, *see* *Trombidium* larva
- Red bugs, apple, *see* *Lygidea mendax* and *Heterocordylus malinus*
- Red composite aphid, *see* *Macrosiphum rudbeckiae*
- Red grain-beetle, *see* *Cathartus gemellatus*
- Red-headed clytus, *see* *Neoclytus erythrocephalus*
- Red-humped caterpillar, *see* *Schizura concinna*
- Red-humped oak caterpillar, *see* *Symmerista albifrons*
- Red lead as an insecticide
 Morse, Me. B. 149, 329, 1907.
- Red-legged flea-beetle, *see* *Crepidodera rufipes*
- Red-legged grasshopper, *see* *Melanoplus femur-rubrum*
- Red-legged ham beetle, *see* *Necrobia rufipes*
- Red-legged locust, *see* *Melanoplus femur-rubrum*
- Red mite of poultry, *see* *Dermanyssus gallinae*
- Red-necked cane-borer, *see* *Agrilus ruficollis*
- Red scale, *see* *Chrysomphalus aurantii*
- Red-shouldered plant-bug, *see* *Thyanta custator*
- Red-shouldered twig-borer, *see* *Sinoxylon basilare*
- Red spider, *see* *Tetranychus bimaculatus*
- Red-tailed bot-fly, *see* *Gastrophilus haemorrhoidalis*
- Red turnip beetle, *see* *Entomoscelis adonidis*
- Red turpentine beetle, *see* *Dendroctonus valens*
- Redwinged pine beetle, *see* *Dendroctonus rufipennis*
- Redwood bark-beetle, *see* *Phloeosinus sequoiae*
- Reduviolus ferus*
 Garman & Jewett, Ky. B. 187, 585, '14.
 Marsh, U. S. B. 64, 74, 1910.
- Smith, N. J. R., 1911, 451.
- Webster & Phillips, U. S. B. 110, 136, 1912.
- Reduvius personatus*
 Felt, N. Y. St. Mus. B. 129, 22, 1909.
 Felt, N. Y. St. Mus. B. 136, 27, 1912.
 Herrick, Household Ins. 419, 1914.
 Whitmarsh, Ohio B. 253, 143, 1912.
- Remigia repanda*
 Jones, J. Ec. Ent. VI, 236, 1913.
 Watson, Fla. R., 1913, LXX.
- Repellents against root aphid
 Forbes, Ill. B. 130, 1908.
- Resin-lime mixture
 Jarvis, Conn. Storrs B. 56, 226, 1909.
 Stone & Fernald, Mass. B. 123, 9, 1908.
- Resin-lime-arsenic mixture
 Smith, N. J. Ent. C. 38.
- Resplendent shield-bearer, *see* *Coptodisca splendoriferella*
- Retinia, *see* *Evetria*
- Rex lime and sulphur
 Fernald, Mass. B. 116, 17, 1907.
 Smith, N. J. R., 1907, 450.
- Rex lime and sulphur with lead arsenate
 Watkins, Ill. Hort. Soc. f. 1908, 119.
- Rex spray
 Henderson, Idaho B. 56, 3, 1907.
- Rexo Dip
 ——— U. S. D. Ins. & Fung. Bd., Ins. 1, p. 18, 1914.
- Rhabdophaga rigidae*
 Felt, N. Y. St. Mus. Mem. 8, 636, 1906.
- Rhabdophaga salicis*
 Felt, N. Y. St. Mus. Mem. 8, 299, 1905.
- Rhabdophaga strobiloides*
 Felt, N. Y. St. Mus. Mem. 8, 639, 1906.
- Rhabdopterus picipes*
 Quaintance, Pr. Ent. Soc. Wash. XIV, 212, 1912.
- Rhagium lineatum*
 Felt, N. Y. St. Mus. Mem. 8, 366, 1906.
- Rhagoletis cingulata*
 Baldwin, Ind. Ent. R. 5, 102, 1912.
 Caesar, Ont. Ent. Soc. R. 43, 79, 100, '13.
 Caesar, Can. Hort. XXVII, 281, 1914.
 Paddock, O. Farm., Aug. 8, 1914, 91.
 Felt, N. Y. Fr. Grow. Assoc., 1910, 35.
 Felt, N. Y. R. 26, 42, 1911.
 Gossard, Ohio B. 233, 129, 1911.
 Herrick, J. Ec. Ent. VI, 79, 1913.
 Herrick, N. Y. Fr. Grow. Assoc., '13, 41.

- Illingworth, N. Y. C. B. 325, 191, 1912.
 Lochhead, Syn. Ec. Ent. 91, 1914.
 Moore, Wis. B. 190, 28, 1910.
 O'Kane, Inj. Ins. 345, 1914.
 Parrott, N. Y. Fr. Grow. Assoc., '13, 254.
 Sanderson, Ins. Pests, 667, 1912.
 Severin, Can. Ent. 1914, 311.
 Slingerland & Crosby, Man. Fr. Ins. 304, 1914.
 Treherne, Pr. Ent. Soc. B. C., 4, 22, '14.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 160.
- Rhagoletis fausta**
 Caesar, Ont. Ent. Soc. R. 43, 79, 100, 1913.
 Herrick, J. Ec. Ent. VI, 79, 1913.
 Herrick, N. Y. Fr. Grow. Assoc., '13, 41.
 Illingworth, N. Y. C. B., 325, 191, 1912.
 Severin, Can. Ent., 1914, 311.
 Slingerland & Crosby, Man. Fr. Ins. 306, 1914.
- Rhagoletis intrudens**
 Aldrich, Can. Ent., 1909, 69.
- Rhagoletis pomonella**
 Baldwin, Ind. Ent. R. 5, 88, 1912.
 Barre & Conradi, S. C. B. 141, 23, 1909.
 Bethune, Ont. Agr. Coll. B. 158, 4, 1907.
 Bethune, Ont. Agr. Coll. R. 34, 31, 1909.
 Britton, Conn. R. 5, 260, 1906.
 Buckley, Me. Dept. Agr. B., vol. X, 3, 6, 1911.
 Caesar, Farm & Dairy, Can., Sept. 15, 1910, 4.
 Caesar, Ont. Ent. Soc. R. 40, 18, 1910.
 Caesar, Ont. Ent. Soc. R. 41, 22, 1911.
 Caesar, Ont. Ent. Soc. R. 42, 29, 1912.
 Caesar, Ont. Ent. Soc. R. 43, 80, 1913.
 Caesar, Ont. Ent. Soc. R. 44, 50, 1914.
 Card, R. I. R. 20, 211, 1908.
 Card & Blake, R. I. R. 18, 197, 1906.
 Clinton & Britton, Conn. R. f. 1909, 1910, 593, 1911.
 Crandall, Ill. Hort. Soc. f. 1911, 343, 1912.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 60, 1913.
 Felt, N. Y. R. 21, 91, 1906.
 Felt, N. Y. Fr. Grow. Assoc., '06, 122.
 Felt, U. S. B. 60, 89, 1906.
 Felt, C. Gentl., 1907, 640.
 Felt, N. Y. R. 23, 33, 1908.
 Felt, Mass. Fr. Grow. Assoc. R. 12, 16, 141, 1910.
 Fletcher, Ont. Ent. Soc. R. 37, 84, 1907.
 Fulton, Wright & Gregg, Pa. B. 110, 12, 1911.
 Funk, Pa. Dept. Agr. B. 152, 228, 1907.
 Gardner, Me. Comm. Agr. R. f. '11, 50.
 Gardner, Me. Comm. Agr. R., 1913, 61, 1914.
 Garman, Ky. B. 133, 62, 1908.
 Gibson, Ont. Ent. Soc. R. 41, 17, 1911.
 Gibson, Can. Hort. XXXV, 254, 1912.
 Gibson, Ont. Ent. Soc. R. 43, 14, 1913.
 Gossard, Ohio B. 233, 104, 1911.
 Haseman, Mo. Hort. Soc., 1911, 248.
 Herrick, Rur. N. Y., 1911, 558.
 Hitchings, Me. Dept. Agr. B., vol. IX, 1, 8, 1910.
 Hitchings, Me. Ent. R. 5, 9, 1910.
 Hitchings, N. H. Hort. Soc., 1910, 91.
 Hood, Mass. C. 3, 1907.
 Illingworth, N. Y. C. B. 324, 129, 1912.
 Jarvis, Conn. Storrs B. 56, 240, 1909.
 Jarvis, Conn. Storrs B. 66, 254, 1911.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 369.
 Johannsen & Patch, Me. B. 195, 238, 1911.
 Lamson, Conn. Storrs B. 71, 70, 1912.
 Lochhead, Ont. Agr. Coll. B. 144, 32, 1905.
 Lochhead, Ont. Ent. Soc. R. 36, 135, '06.
 Lochhead, Farm & Dairy, Can., July 22, 1909, 8.
 Lochhead, Syn. Ec. Ent. 91, 1914.
 Melander, Wash. B. 103, 43, 1911.
 Morris, Ont. Ent. Soc. R. 44, 23, 1914.
 Munson, Me. Dept. Agr. Quart. B., vol. IV, 17, 1905.
 O'Kane, N. H. Hort. Soc., 1910, 86.
 O'Kane, N. H. C. 14, 1911.
 O'Kane, J. Ec. Ent. IV, 173, 1911.
 O'Kane, N. H. B. 163, 30, 1912.
 O'Kane, Inj. Ins. 343, 1914.
 Osborn, U. S. B. 52, 51, 1905.
 Parrott, N. Y. Dept. Agr. B. 50. 1742, 1913.
 Patch, Me. B. 134, 221, 1906.
 Patch & Munson, Me. B. 109, 169, 1905.
 Petch, Ont. Ent. Soc. R. 43, 73, 1913.
 Quaintance, U. S. C. 101, 1, 1908.
 Ross, Can. Hort. XXXIV, 278, 1911.

Rhagoletis pomonella (*Cont'd*)

- Ross, Ont. Ent. Soc. R. 43, 67, 1913.
 Sanderson, N. H. B. 129, 264, 1907.
 Sanderson, Ins. Pests, 632, 1912.
 Schoene & Fulton, N. Y. St. C. 25, 8, '13.
 Severin, Can. Ent. 1914, 310.
 Slingerland & Crosby, N. Y. C. B. 252, 338, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 31, 1914.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 467, 1910.
 Stene, R. I. Bd. Agr. R. 23, 30, 1908.
 Stewart, Pa. B. 128, 127, 1914.
 Surface, Pa. D. A. Zool. V. 12, 369, '08.
 Surface, Pa. Dept. Agr. R. 17, 165, '11.
 Surface, Pa. D. A. Zool. I, 1, 16, 1911.
 Swaine, Ont. Ent. Soc. R. 41, 94, 1911.
 Swaine, Ont. Ent. Soc. R., 42, 72, 1912.
 Walker, N. H. Hort. Soc., 1911, 90.
 Weed, Nat'l Stockm. & Farm., May 16, 1914, 9.
 West, Vt. Hort. Soc. R. 10, 25, 1913.
 Woods, J. Ec. Ent. VII, 398, 1914.
 ——— Conn. Farm., Mar. 16, 1912, 6.
 ——— Rur. N. Y., 1907, 732.
 ——— U. S. Y. B., 1905, 632.
 ——— U. S. Y. B., 1906, 512.
 ——— U. S. Y. B., 1907, 546.

Rhagoletis ribicola

- Lawrence, Better Fr., Dec. 1912, 16.
 Slingerland & Crosby, Man. Fr. Ins. 357, 1914.

Rhagoletis spp.

- Hollinger, Mich. Hort. Soc., '13, 70, '14.

Rhaphidia sp. on codling moth

- Quaintance, U. S. Y. B., 1907, 443.

Rhigopsidius tucumanus

- Marlatt, U. S. Fed. Hort. Bd. R. 8, '14.

Rhinoncus pyrrhopus

- Pierce, U. S. B. 100, 79, 1912.

Rhipicephalus sanguineus

- Bishopp, Ent. News, 1913, 368.
 Hooker, Bishopp & Wood, U. S. B. 106, 102, 1912.
 Hunter & Bishopp, U. S. Y. B., '10, 230.
 Hunter & Hooker, U. S. B. 72, 47, 1907.

Rhipicephalus sp.

- U. S. Y. B., 1906, 516.

Rhizobius debilis

- Isaac, Bug vs. Bug, 14, 1906.
 Schwarz, U. S. B. 54, 75, 1905.

Rhizobius lactucae

- Chittenden, Ins. Inj. Veg. 249, 1907.

Rhizobius lophanthae

- Cotton, Ohio Nurs. Orch. Insp. B. 7, 33, 1906.
 Essig, Pom. Jr. Ent. III, 518, 1911.
 Essig, Cal. Hort. B. II, 1-2, 224, 1913.
 Isaac, Bug vs. Bug, 13, 1906.
 Marlatt, U. S. B. 62, 62, 1906.
 Maskew, U. S. B. 54, 75, 1905.
 Quayle, Cal. B. 214, 469, 1911.
 Quayle, Cal. B. 222, 138, 1911.
 Quayle, J. Ec. Ent. IV, 514, 1911.
 Quayle, Cal. B. 226, 338, 1912.
 Smith, Cal. Hort. Comm. C., Nov. '05, 5.
 Smith, U. S. B. 52, 75, 1905.

Rhizobius toowoomba

- Austin, Cal. Hort. Comm. Bien. R. 1, 176, 1905.

Rhizobius ventralis

- Cotton, Ohio Nurs. Orch. Insp. B. 7, 35, 1906.
 Essig, Cal. Hort. B. II, 1-2, 223, 1913.
 Essig, Cal. Hort. B. III, 3, 132, 1914.
 Essig, Pom. Jr. Ent. II, 270, 1910.
 Howard & Fiske, U. S. B. 91, 30, 1911.
 Isaac, Bug vs. Bug, 10, 1906.
 Quayle, Cal. B. 214, 459, 1911.
 Quayle, Cal. B. 223, 192, 1911.
 Quayle, J. Ec. Ent. IV, 514, 1911.
 Timberlake, J. Ec. Ent. VI, 303, 1913.

Rhizoglyphus hyacinthi

- Brittain, Pr. Ent. Soc. B. C., 4, 17, '14.
 Cooley, Mont. B. 98, 123, 1914.
 Morris, Ont. Ent. Soc. R. 44, 24, 1914.
 Treherne, Pr. Ent. Soc. B. C., 4, 31, '14.
 Windle, J. Ec. Ent. IV, 127, 1911.

Rhizopertha dominica

- Chittenden, Amer. Mill., Jan. 1, 1911, 471.
 Chittenden, U. S. B. 96, 29, 1911.
 Tucker, La. R. f. 1912, 18.
 ——— U. S. Y. B., 1908, 579.

Rhodites bicolor

- Felt, N. Y. St. Mus. Mem. 8, 647, 1906.

Rhodites dichlocerus

- Felt, N. Y. St. Mus. Mem. 8, 648, 1906.

Rhodites globulus

- Felt, N. Y. St. Mus. Mem. 8, 647, 1906.

Rhodites ignota

- Felt, N. Y. St. Mus. Mem. 8, 647, 1906.

- Rhodites radicum**
Cook, N. J. C. 34, 8.
Felt, N. Y. St. Mus. Mem. 8, 647, 1906.
Gibson, Ont. Ent. Soc. R. 36, 121, 1906.
- Rhodites rosae**
Felt, N. Y. St. Mus. Mem. 8, 647, 1906.
- Rhodites verna**
Felt, N. Y. St. Mus. Mem. 8, 648, 1906.
- Rhogas autographae**
Hyslop, U. S. B. 95, 114, 1912.
- Rhogas canadensis**
Johannsen, Me. B. 210, 36, 1913.
- Rhopalomyia grossulariae**
Britton, Conn. R. 13, 255, 1914.
Houser, J. Ec. Ent. V, 180, 1912.
- Rhopalosiphum capreae**
Gillette, J. Ec. Ent. IV, 320, 1911.
- Rhopalosiphum dianthi**
Pettit, Mich. B. 233, 174, 1906.
Tucker, Kans. Farm., July 19, 1906, 748.
——— U. S. Y. B., 1907, 544.
——— U. S. Y. B., 1908, 572.
- Rhopalosiphum nymphaeae**
Davis, Ill. Ent. R. 27, 118, 1912.
Patch, Me. B. 202, 171, 1913.
- Rhopalosiphum pastinacae**
Gillette, J. Ec. Ent. IV, 320, 1911.
- Rhopalosiphum persicae**, *see* **Myzus**
- Rhopalosiphum rhois**
Swenk, Nebr. Hort. Soc., 1909, 104.
- Rhopalosiphum violae**
Douglass, Ind. Ent. R. 1, 103, 1908.
Douglass, Cal. Hort. B., II, 1-2, 76, '13.
Gahan, Md. B. 119, 18, 1907.
- Rhopalosiphum xylostei**
Murtfeldt, J. Ec. Ent. IV, 227, 1910.
- Rhopobota vacciniiana**, *see* **Eudemis**
- Rhopoideus citrinus**
Marlatt, U. S. B. 62, 61, 1906.
Quaintance, U. S. C. 124, 10, 1910.
- Rhubarb curculio**, *see* **Lixus concavus**
- Rhynchites bicolor**
Cooley, Mont. B. 88, 88, 1912.
Dickerson, J. Ec. Ent. III, 316, 1910.
Essig, Cal. Hort. B. II, 1-2, 240, 1913.
Gates, J. Ec. Ent. II, 465, 1909.
Lovett, Oreg. Bien. Crop Pest R. f. 1913-1914, 150.
- Rhyncholophus gracilipes**
Ewing, Oreg. B. 121, 62, 1914.
- Rhyncholophus parvus**
Chittenden, U. S. C. 43, 2nd Ed., 5, '09.
- Rhynchophora**—*Parasites of*
Pierce, J. Ec. Ent. I, 380, 1908.
- Rhynchophorus cruentatus**
Berger, Fla. R. 1907, XXXIX.
- Rhynchoprion penetrans**
Herrick, Household Ins. 149, 1914.
- Rhyncolus brunneus**
Felt, N. Y. St. Mus. Mem. 8, 666, 1906.
- Rhyphus punctatus**
Johannsen, Me. B. 177, 35, 1910.
- Ribbed pine borer**, *see* **Rhagium lineatum**
- Rice weevil**, *see* **Calandra oryzae**
- Ringed millipede**, *see* **Cambala annulata**
- Ripersia smithii**
Essig, Cal. Hort. B. II, 1-2, 107, 1913.
- Ripersia villosa**
Carnes, Cal. Hort. Comm. Bien. R. 2, 178, 1907.
- Rivoltasia bifurcata**
Banks, U. S. C. 92, 4, 1907.
- Roaches**
Dietz, Ind. Ent. R. 5, 173, 1912.
Herrick, Household Ins. 138, 1914.
Hirschberg, Mich. Farm., Aug. 23, 1913, 155.
Lochhead, Syn. Ec. Ent. 35, 1914.
O'Kane, Inj. Ins. 353, 1914.
Smith, N. J. B. 203, 4, 1907.
Surface, Pa. D. A. Zool. V, 12, 388, 1908.
Washburn, Minn. R. 11, 72, 1906.
——— Nor'-West Farm, June 5, '12, 796.
——— Rur. N. Y., 1910, 845.
- Roaches and roundworms**
Boston, Amer. Med. III, 260, 1908.
- Roach killer**
——— U. S. D. A. Ins. & Fung. Bd., Ins. 1, p. 9, 1914.
- Roach powder**
——— U. S. D. A. Ins. & Fung. Bd., Ins. 3, p. 34, 1914.
——— U. S. D. A. Ins. & Fung. Bd., Ins. 6, p. 82, 1914.
- Roach Sault**
——— U. S. D. A. Ins. & Fung. Nos. 36, 37, 1913.
——— U. S. D. A. Ins. & Fung. No. 108, 1913.
- Roach Trap**
Washburn, J. Ec. Ent. VI, 327, 1913.
- Rocky Mountain locust**, *see* **Melanoplus spretus**

- Rocky Mountain tent-caterpillar, *see* *Malacosoma fragilis*
- Roentgen Rays and Insects
Hunter, J. Ec. Ent. V, 188, 1912.
- Roller worm, *see* *Eudamus proteus*
- Romaleum atomarium
Felt, N. Y. St. Mus. Mem. 8, 434, 1906.
- Root-louse syrphus-fly, *see* *Pipiza radicans*
- Root maggots
Fernald & Fernald, Mass. R. 17, 113, 1905.
Fletcher, Farm. Advocate, Can., 1907, 1825.
O'Kane, N. H. B. 163, 31, 1912.
Smith, N. J. R., 1907, 432.
Smith, N. J. R., 1910, 353.
- Rose aphid, *see* *Macrosiphum rosae*
- Rose chafer, *see* *Macroductylus subspinosus*
- Rose insects
Surface, Pa. D. A. Zoöl. I, 1, 54, 1911.
Surface, Pa. D. A. Zoöl. II, 6, 253, 1912.
- Rose leaf-beetle, *see* *Nodonota puncticollis*
- Rose leaf-hopper, *see* *Empoasca rosae*
- Rose-leaf tobacco extract
Smith, N. J. R., 1904, 651, 1905.
- Rose nicotine
Smith, N. J. R., 1905, 626, 632.
- Rosin-naphtha
Smith, N. J. R., 1905, 609.
- Rose scale, *see* *Aulacaspis rosae*
- Rose slug, *see* *Endelomyia rosae*
- Rose snout beetle, *see* *Rhynchites bicolor*
- Rosin oil
Jarvis, Conn. Storrs B. 54, 187, 1908.
- Rosy apple aphid, *see* *Aphis sorbi*
- Rosy hyarpax, *see* *Hyparpax aurora*
- Roundheaded apple-tree borer, *see* *Saperda candida*
- Roundheaded pine beetle, *see* *Dendroctonus convexifrons*
- Rufous scale, *see* *Selenaspidius articulatus*
- Rusoline
——— U. S. D. A. Ins. & Fung. No. 96, 1913.
- Rustic borer, *see* *Xylotrechus colonus*
- Rust mite, *see* *Eriophyes oleivorus*
- Rust-red flour beetle, *see* *Tribolium ferrugineum*
- Rusty-brown plum-louse *see* *Aphis setariae*
- Rusty-brown tortrix, *see* *Platynota flavedana*
- Rusty tussock moth, *see* *Hemerocampa antiqua*
- Sabulodes transversata*
Felt, N. Y. St. Mus. Mem. 8, 539, 1906.
- Saddle-back caterpillar, *see* *Sibine stimulea*
- Saissetia fillicum
Britton, Conn. R. 5, 239, 1906.
- Saissetia hemisphaerica
Britton, Conn. B. 151, 9, 1905.
Britton, Conn. R. 5, 239, 1906.
Britton, Cal. Hort. Comm. Bien. R. 2, 192, 1907.
Davis, Ill. Ent. R. 27, 124, 1912.
Douglass, Ind. Ent. R. 4, 182, 1912.
Essig, Pom. Jr. Ent. II, 216, 1910.
Essig, Cal. Hort. B. II, 1-2, 117, 1913.
Fernald, Mass. Crop. R. f. Oct. '07, 32.
Fernald, Mass. Bd. Agr. R. 55, 387, '08.
Gahan, Md. B. 119, 12, 1907.
Hood, Mass. C. 6, 3, 1907.
Quayle, Cal. B. 214, 478, 1911.
Quayle, Cal. B. 223, 194, 1911.
Sanders, J. Ec. Ent. II, 439, 1909.
Sanders, J. Ec. Ent. II, 440, 1909.
Carnes, Cal. Hort. Comm. Bien. R. 2, 193, 1907.
- Saissetia oleae
Coit, Ariz. B. 58, 318, 1908.
Cook, Cal. Cult. XLI, 448, 1913.
Cooper, Cal. Hort. Comm. Bien. R. 2, 9, 1907.
Day, Cal. Cult., XXV, 175, 199, 1905.
Douglass, Ind. Ent. R. 4, 183, 1912.
Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 111, 1905.
Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 223, 1907.
Essig, Cal. Cult., XXXIII, 516, 1909.
Essig, Pom. Jr. Ent. I, 12, 1909.
Essig, Cal. Cult., XXXV, 190, 1910.
Essig, Ventura Co. (Cal.) Hort. Comm. B. 2, 1911.
Essig, Cal. Hort. B. I, 1, 15, 1911.
Essig, Cal. Hort. B. II, 1-2, 118, 1913.
Gahan, Md. B. 119, 11, 1907.
Jeffrey, Cal. Hort. Comm. Bien. R. 2, 283, 1907.
Jones, Cal. Cult., XXIX, 388, 1907.
Maskew, Cal. Cult., XXV, 269, 1905.
Mills, Cal. Cult., XXVII, 175, 1906.
Morrill, Cal. Fr. Grow., Apr. 2, 1910, 5.

- Newell & Barber, U. S. B. 122, 65, 1913.
 Pease, Cal. Hort. Comm. C. Nov. '05, 8.
 Pease, Cal. Cult., XXX, 571, 1908.
 Quayle, J. Ec. Ent. III, 473, 1910.
 Quayle, Cal. B. 214, 445, 1911.
 Quayle, Cal. B. 223, 151, 1911.
 Quayle, Ent. News, 1911, 167.
 Quayle, J. Ec. Ent. IV, 301, 512, 1911.
 Quayle, U. S. D. A. B. 134, 12, 1914.
 Sanders, J. Ec. Ent. II, 440, 1909.
 Volck, Pac. Rur. Press, LXXX, 526, '10.
 Volck, Pac. Rur. Press, LXXXIII, 80, 1912.
 Woglum, U. S. B. 79, 12, 1909.
 Woglum, U. S. B. 908, 1912.
 Woodbridge, Pac. Rur. Press, LXX, 205, 1905.
 ——— S. W. Stockm., Mar. 5, 1909, 3.
 ——— Pac. Rur. Press, LXXXV, 587, 685, 1913.
 ——— U. S. Y. B., 1906, 513.
- Saissetia oleae**, *parasites*
 Berger, Cal. Hort. B. III, 5, 212, 1914.
 Mills, Cal. Cult., XXVIII, 126, 1907.
- Salimeme**
 Smith, N. J. R., 1904, 642, 1905.
- Salt-marsh caterpillar**, *see* **Estigmene acraea**
- Samia cecropia**
 'Cotton, Ohio Nurs. Orch. Insp. B. 7, 40, 1906.
 Davis, Ent. News, 1906, 368.
 Douglass, Ind. Ent. R. 2, 46, 1910.
 Felt, N. Y. St. Mus. Mem. 8, 539, 1906.
 Felt, N. Y. R. 27, 116, 1912.
 Garman, Ky. B. 133, 34, 1908.
 Gibson, Ott. Nat. XX, 149, 1906.
 Hitchings, Me. Comm. Agr. R., 1907, 209, 1908.
 Hitchings, Me. Ent. R. 3, 5, 1908.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 341.
 Patch, Me. B. 108, 165, 1905.
 Woods, Me. B. 137, 294, 1906.
 ——— C. Gentl., 1905, 584.
 ——— C. Gentl., 1908, 746.
- Samia gloveri**
 Cooley, Mont. B. 75, 109, 1909.
- San Jose scale**, *see* **Aspidiotus perniciosus**
- Sanax Disinfecting Fluid**
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 3, p. 47, 1914.
- Sand cricket**, *see* **Stenopelmatus irregularis**
- Sand flies**, *see* **Ceratopogon**
- Sanitas**
 ——— U. S. D. A. Ins. & Fung. No. 69, 1913.
- Sanninoidea exitiosa**
 Adams, Ark. B. 92, 12, 1907.
 Alderman, Giddings & Rumsey, W. Va. C. 7, 34, 1913.
 Ball & Titus, Deseret Farm., May 6, 1911, 2.
 Barre & Conradi, S. C. B. 141, 42, 1909.
 Becker, Pr. Ark. Hort. Soc., 1912, to 1913, 28.
 Bethune, Ont. Agr. Coll. B. 158, 24, '07.
 Blake, Rur. N. Y., 1909, 986.
 Blake, N. J. B. 231, 27, 1910.
 Brittain, Pr. Ent. Soc. B. C., 4, 15, 1914.
 Britton, Conn. R. 9, 359, 1910.
 Brown, Nat'l Fr. Grow., Mar. 1908, 14.
 Caesar, Can. Hort. XXXVII, 30, 1914.
 Caesar, Ont. Ent. Soc. R. 42, 30, 1912.
 Chandler, Mo. Hort. Soc., 1909, 360.
 Chandler, Mo. B. 102, 257, 1912.
 Close & Ballard, Md. B. 159, 188, 1911.
 Conradi, S. C. R. 21, 35, 1908.
 Conradi, Prog. Farm., May 6, 1909, 15.
 Conradi & Thomas, S. C. B. 143, 5, 1909.
 Cooper, Cal. Hort. Comm. Month C., Mar. 1906.
 Cory, J. Ec. Ent. IV, 332, 1911.
 Cory, Md. B. 176, 181, 1913.
 Cundiff, Cal. Hort. Comm. C. Feb. 1906, 6.
 Cundiff, Ind. Ent. R. 1, 126, 1908.
 Douglass, Ind. Ent. R. 2, 62, 1910.
 Douglass, Ind. Ent. R. 4, 41, 1912.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 72, 1913.
 Ehrhorn, Pac. Rur. Press. LXXVI, 388, 1908.
 Ehrhorn, Cal. Fr. Grow., Dec. 12, 1908, 13.
 Faurot, Mo. Fr. Exp. Sta. B. 23, 27, '12.
 Faurot, Mo. Bd. Agr. R. 45, 574, 1913.
 Garcia, N. Mex. B. 68, 48, 1908.
 Gillette, Colo. B. 114, 18, 1906.
 Gillette, Colo. R. 19, 143, 1906.
 Gillette, Colo. R. 20, 25, 1907.
 Gossard, Ohio B. 164, 21, 1905.
 Gossard, O. Farm., Mar. 17, 1906, 297.
 Gossard, Nat'l Fr. Grow., Jan. 1907, 23.

Sanninoidea exitiosa (Cont'd)

- Gossard, J. Ec. Ent. I, 189, 1908.
 Gossard, Ohio B. 198, 63, 1908.
 Gossard, Ohio B. 233, 126, 1911.
 Green, Better Fr., May 1911, 43.
 Hadley, Rur. N. Y., 1913, 540.
 Hartman, O. Farm., Sept. 26, 1908, 240.
 Haseman, Mo. Hort. Soc., 1911, 256.
 Headlee, N. J. Hort. Soc., 1913, 52.
 Hinds, Proc. Ala. Hort. Soc. 9, 123, 1911.
 Howard, U. S. R. Ent., 1905, 288.
 Howard, U. S. R. Ent., 1907, 22.
 Jarvis, Conn. Storrs B. 56, 258, 1909.
 Koogle, Am. Agric., Apr. 7, 1906, 461.
 Kyla, Tex. B. 80, 26, 1905.
 Lochhead, Ont. Ent. Soc. R. 36, 134, '06.
 Lochhead, Syn. Ec. Ent. 56, 1914.
 Lyne, Pr. Ent. Soc. B. C., 3, 35, 1913.
 Mason, Farm. Guide, Mar. 23, 1912, 5.
 Morrill, S. W. Stockm., Jan. 20, '11, 1.
 Morrill, S. W. Stockm., Apr. 4, 1913, 8.
 Morrill, J. Ec. Ent. VI, 193, 1913.
 Morris, Farm. Guide, Dec. 21, 1912, 6.
 Niven, Prog. Farm., July 15, 1911, 623.
 Niven, S. C. C. 21, 8, 1913.
 O'Kane, Inj. Ins. 237, 1914.
 Osborn, U. S. B. 52, 50, 1905.
 Paddock, Col. Rur. World, Aug. 8, 1912, 104.
 Parrott, N. Y. Fr. Grow. Assoc., '12, 208.
 Parry, Utah Bd. Hort. Bien. R. f. 1903-1904, 73, 1905.
 Patterson, N. J. R., 1912, 451.
 Popenoe, Kans. Farm., July 26, '06, 773.
 Price, South. Plant., Jan. 1905, 22.
 Price, Va. C. 7, 32, 1909.
 Quaintance, U. S. Y. B., 1905, 330.
 Quaintance, Mich. Hort. Soc., 1905-1906, 120, 1907.
 Quaintance, Pr. Ent. Soc. Wash. IX, 44, 1907.
 Quaintance, Better Fr., June 1909, 13.
 Rosenfeld, La. Hort. Soc., 1908, 109.
 Rumsey & Brooks, W. Va. R. f. 1907-1908, 16.
 Rumsey & Brooks, W. Va. B. 116, 233, 1908.
 Sanderson, Ins. Pests, 645, 1912.
 Sherman, Prog. Farm., Feb. 28, '14, 290.
 Slingerland, N. Y. Fr. Grow. Assoc., 1909, 121.
 Slingerland & Crosby, N. Y. C. B. 252, 341, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 266, 1914.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 473, 1910.
 Smith, N. J. Ent. C. 21.
 Smith, Ga. Bd. Ent. B. 17, 81, 1905.
 Smith, Pr. Columbus Hort. Soc., '05, 59.
 Smith, South Cult., Feb. 1, 1905, 28.
 Smith, Ga. Bd. Ent. B. 20, 164, 1906.
 Smith, Prog. Farm., Aug. 27, 1908, 15.
 Smith, N. J. R., 1909, 399.
 Smith, N. J. R., 1910, 313.
 Smith, N. J. B., 235, 5, 1911.
 Smith, N. J. R., 1911, 433.
 Smith & Lewis, U. S. B. 60, 77, 1906.
 Snodgrass, Nebr. Farm., July 20, 1905, p. 696.
 Starnes, Ga. Hort. Soc. 29 Meet. 60, '05.
 Starnes, Ga. B. 73, 149, 1906.
 Stene, R. I. Bd. Agr. R. 21, 33, 1906.
 Stene, R. I. Nurs. Insp. 1906, 17.
 Stuckey, South. Cult., Aug. 1, 1910, 23.
 Surface, Pa. D. A. Zoöl. V, 12, 390, '08.
 Surface, C. Gentl., 1909, 678.
 Surface, Pa. D. A. Zoöl. VII, 2, 57, 1909.
 Surface, Pa. R. 16, 119, 1910.
 Surface, Pa. D. A. Zoöl. I, 4, 152, 1911.
 Swenk, Nebr. Hort. Soc., 1909, 84, 104.
 Symons, Md. B. 101, 145, 1905.
 Symons, Md. Hort. Soc., 1909, 170, 1910.
 Taft, Mich. Hort. Soc., 1911, 88, 1912.
 Taylor, Colo. B. 119, 11, 1906.
 Treherne, Ont. Ent. Soc. R. 42, 23, 1912.
 Weldon, Colo. B. 169, 9, 1910.
 Wertz, Am. Agric., Jan. 13, 1906, 40.
 Willett, C. Gentl., 1910, 1128.
 Williams & Price, Ala. Poly. B. 156, 125, 606, 1911.
 Worsham, Ga. Bd. Ent. B. 30, 107, 1909.
 Worsham, Ga. Hort. Soc., 1909, 107.
 Worsham, J. Ec. Ent. II, 207, 1909.
 ——— Colo. R. Bd. Hort. f. 1909, 146.
 ——— C. Gentl., 1906, 400.
 ——— C. Gentl., 1910, 517.
 ——— Ind. Farm., Feb. 17, 1912, 9.
 ——— Rur. N. Y., 1908, 711.
 ——— Rur. N. Y., 1909, 641.
 ——— Rur. N. Y., 1910, 1049.
 ——— S. W. Stockm., Mar. 1, 1912, 16.
 ——— S. W. Stockm., Dec. 19, 1913, 10.

- U. S. Y. B., 1906, 512.
 ——— U. S. Y. B., 1908, 576.
- Sanninoidea exitiosa quarantine**
 Cook, Cal. Hort. Comm. R. 5, 12, 1912.
- Sanninoidea opalescens**
 Ball & Titus, Utah Hort. Comm. Bien. R. f. 1909-1910, 48, 1911.
 Bremner, Cal. Hort. Comm. Destr. Ins. 7, 1910.
 Cook, Cal. Hort. B. I, 4, 111, 1912.
 Cooper, Cal. Hort. Comm. Ins. & Insect., 16, 1905.
 Cordley, Better Fr., Aug. 1912, 9.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 113, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 225, 1907.
 Essig, Cal. Hort. B. II, 1-2, 193, 1913.
 Moulton, Cal. Hort. Comm. Bien. R. I. 178, 1905.
 Moulton, U. S. B. 97, 65, 1911.
 Quaintance, U. S. F. B., 1905, 330.
 Sanderson, Ins. Pests, 645, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 275, 1914.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 157.
 ——— Pac. Rur. Press, LXXXI, 232, 1911.
- Sanninoidea pacifica**
 Morris, Cal. B. 228, 372, 1912.
 Morris, Pac. Rur. Press, LXXXIII, 293, 1912.
 Moulton, Cal. Cult., XXXVI, 734, '11.
- Sanoc**
 ——— U. S. D. Ins. & Fung. No. 133, 1913.
- "San-U-Zay"**
 Britton & Walden, Conn. R. 8, 840, '09.
 Jarvis, Conn. Storrs B. 54, 178, 1908.
 Smith, N. J. R., 1909, 369.
- Saperda bivittata**
 Slingerland & Crosby, N. Y. C. B. 252, 340, 1908.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 469, 1910.
- Saperda calcarata**
 Britton, Conn. R. 7, 336, 1908.
 Caesar, Ont. Ent. Soc. R. 42, 34, 1912.
 Criddle, Ont. Ent. Soc. R. 43, 100, 1913.
 Felt, N. Y. St. Mus. Mem. 8, 98, 1905.
 Gee, J. Ec. Ent. V, 336, 1912.
- Sanders, Wis. B. 227, 25, 1912.
 Smith, U. S. B. 67, 105, 1907.
 Swaine, Ont. Ent. Soc. R. 43, 91, 1913.
 Weiss & Patterson, N. J. C. 15, 12, 1912.
 ——— U. S. Y. B., 1908, 578.
 ——— Wyo. Bd. Hort. 2nd Bien. R., 37, 1907-1908.
 ——— Wyo. Bd. Hort. 3rd Bien. R., 37, 1909-1910.
- Saperda candida**
 Alderman, Giddings & Runsey, W. Va. C. 7, 25, 1913.
 Baldwin, Ind. Ent. R. 5, 58, 1912.
 Beach, Iowa B. 127, 54, 1912.
 Bethune, Ont. Agr. Coll. B. 158, 16, '07.
 Britton, Conn. Ent. R. 7, 333, 1907.
 Britton, Conn. R. 7, 333, 1908.
 Buckley, Me. Dept. Agr. B., vol. X, 3, 5, 1911.
 Chandler, Mo. Hort. Soc., 1909, 354.
 Chandler, Mo. B. 102, 250, 1912.
 Chase, Ga. Bd. Ent. B. 38, 29, 1913.
 Chittenden, U. S. C. 32, 3rd Ed. 1, 1907.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 32, 1913.
 Douglass, Ind. Ent. R. 2, 84, 1910.
 Douglass, Ind. Ent. R. 3, 1910.
 Ehrhorn, Pac. Rur. Press, LXXXVI, 388, 1908.
 Felt, N. Y. St. Mus. Mem. 8, 84, 1905.
 Fulton, Wright & Gregg, Pa. B. 110, 12, 1911.
 Funk, Pa. Dept. Agr. B. 152, 209, 1907.
 Garcia, N. Mex. B. 68, 51, 1908.
 Gardner, Me. Comm. Agr. R. f. '11, 51.
 Garman, Ky. B. 133, 49, 1908.
 Gossard, Ohio B. 164, 18, 1905.
 Gossard, Ohio B. 198, 50, 1908.
 Gossard, Ohio B. 233, 99, 1911.
 Haseman, Mo. Hort. Soc., 1911, 221.
 Hewitt & Hayhurst, Ark. B. 109, 427, 1911.
 Hitchings, Me. Comm. Agr. R., 1907, 300, 1908.
 Hitchings, Me. Dept. Agr. Quart. B., vol. VII, 1, 32, 1908.
 Hitchings, Me. Ent. R. 3, 96, 1908.
 Hitchings, Me. Ent. R. 5, 9, 1910.
 Jarvis, Conn. Storrs B. 56, 242, 1909.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 324.
 Kirkpatrick, Iowa Agric., Mar. '09, 264.

Saperda candida (*Cont'd*)

- Kirkpatrick, Kans. Farm., May 1, 1909, 13.
 Lambert, Col. Rur. World, May 1, 1907, 139.
 Lamson, Conn. Storrs B. 71, 61, 1912.
 Lewis, Ga. Bd. Ent. B. 30, 21, 1909.
 Lochhead, Ont. Agr. Coll. B. 144, 29, 1905.
 Lochhead, Syn. Ec. Ent. 78, 1914.
 Mead, Rur. N. Y., 1912, 997.
 Munson, Me. Dept. Agr. Quart. B., vol. IV, 1, 12, 1905.
 O'Kane, Inj. Ins. 235, 1914.
 Parrott, N. Y. Dept. Agr. B. 50, 1734.
 Parry, Utah Bd. Hort., Bien. R. f. 1903-1904, 72, 1905.
 Pellet, Col. Rur. World, May 31, 1905, 171.
 Rumsey & Brooks, W. Va. R. f. 1907-1908, 15.
 Rumsey & Brooks, W. Va. B. 116, 231, 1908.
 Sanderson, Ins. Pests, 588, 1912.
 Severin, S. D. Hort. Soc. 7th R., 239, '10.
 Slingerland & Crosby, Man. Fr. Ins. 185, 1914.
 Smith, U. S. B. 67, 104, 1907.
 Smith, N. C. B. 206, 52, 1910.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 8.
 Stene, R. I. Bd. Agr. R. 21, 35, 1906.
 Stene, R. I. Nurs. Insp., 1906, 19.
 Surface, Pa. Dept. Agr. R. 16, 118, 1910.
 Surface, Pa. D. A. Zool. I, 4, 159, 1911.
 Swaine, Ont. Ent. Soc. R. 41, 88, 1911.
 Symons, Md. B. 101, 127, 1905.
 Wilson, Oreg. Circ. B. 15.
 Wilson, Better Fr., Feb. 1912, 76.
 ——— C. Gentl., 1905, 501.
 ——— Farm. World, Can., 1907, 502.

Saperda concolor

- Felt, N. Y. St. Mus. Mem. 8, 474, 1906.
 Gibson, Ont. Ent. Soc. R. 44, 19, 1914.

Saperda cretata

- Chittenden, U. S. C. 32, 3rd Ed. 7, 1907.
 Slingerland & Crosby, Man. Fr. Ins. 193, 1914.

Saperda discoidea

- Felt, N. Y. St. Mus. Mem. 8, 269, 1905.

Saperda fayi

- Felt, N. Y. St. Mus. Mem. 8, 283, 1905.

Saperda lateralis

- Felt, N. Y. St. Mus. Mem. 8, 270, 1905.
 Felt, N. Y. St. Mus. Mem. 8, 445, 1906.

Saperda mutica

- Felt, N. Y. St. Mus. Mem. 8, 469, 1906.

Saperda obliqua

- Felt, N. Y. St. Mus. Mem. 8, 480, 1906.
 Johannsen, Me. B. 187, 7, 1911.

Saperda populnea

- Felt, N. Y. St. Mus. Mem. 8, 474, 1906.

Saperda puncticollis

- Felt, N. Y. St. Mus. Mem. 8, 478, 1906.

Saperda sp.

- Pac. Rur. Press, LXXX, 44, 1910.

Saperda tridentata

- Douglass, Ind. Ent. R. 4, 108, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 67, 1905.
 Forbes, Ill. B. 154, 13, 1912.
 Forbes, Ill. Ent. R. 27, 11, 1912.
 Headlee, Kans. Farm., Oct. 10, 1907, 1116.
 Johannsen, Me. B. 207, 464, 1912.
 Popenoe, Kans. Farm., July 26, 1906, 773.
 Swenk, Nebr. Hort. Soc., 1909, 103.
 Washburn, Minn. Ent. R. 13, 104, 1910.
 Washburn, Minn. R. 14, 57, 1912.
 ——— U. S. Y. B., 1906, 514.
 ——— U. S. Y. B., 1907, 550.
 ——— U. S. Y. B., 1908, 578.

Saperda vestita

- Britton, Conn. R. 13, 256, 1914.
 Davis, J. Ec. Ent. III, 184, 1910.
 Felt, N. Y. St. Mus. Mem. 8, 91, 1905.
 Levison, J. Ec. Ent. II, 363, 1909.

Sarcophaga carnaria

- Sanderson, Ins. Pests, 107, 1912.

Sarcophaga cimbicis

- Kelly, J. Agr. Res. II, 441, 1914.
 Webster, U. S. C. 84, 4, 1907.

Sarcophaga georgiana

- Dew, J. Ec. Ent. VI, 365, 1913.
 Felt, N. Y. R. 28, 80, 1913.
 Webster, U. S. B. 67, 98, 1907.
 Webster, U. S. C. 84, 4, 1907.
 Webster, U. S. Y. B., 1907, 248.
 ——— U. S. Y. B., 1906, 509.

Sarcophaga heliciis, *see* **Helicobia****Sarcophaga hunteri**

- Kelly, J. Agr. Res. II, 441.
 Walton, Pr. Ent. Soc. Wash. XIV, 208, 1912.

- Webster, U. S. C. 84, 4, 1907.
- Sarcophaga kellyi**
 Kelly, J. Agr. Res. II, 435, 1914.
 Wilson, Oreg. Bien. Crop. Pest R. f. 1913-1914, 136.
- Sarcophaga sarraceniae**
 Kelly, J. Agr. Res. II, 441, 1914.
- Sarcophaga sinuata**
 Kelly, J. Agr. Res. II, 441, 1914.
- Sarcophaga sp.**
 Riley, Can. Ent., 1906, 413.
 Wohl, N. Y. Med. J., Nov. 22, '13, 1018.
- Sarcopsylla gallinae**
 Bentley, Tenn. Bd. Ent. R. f. 1913, 32.
 Ewing, Oreg. Coll. B. 92, 13, 1913.
 Herrick, J. Ec. Ent. I, 355, 1908.
 Herrick, Rur. N. Y., 1912, 444.
 O'Kane, Inj. Ins. 378, 1914.
 Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 145, 1911.
 Sherman, J. Ec. Ent. II, 201, 1909.
- Sarcoptes equi**
 Fischer, Ohio Bd. Agr. R. 61, 712, 1906.
- Sarcoptes laevis**
 Marsh, U. S. F. B. 390, 39, 1910.
- Sarcoptes laevis var. gallinae**
 Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 142, 1911.
- Sarcoptes mutans**
 Dean, Kans. Farm., Feb. 4, 1911, 26.
 Law, U. S. B. An. I. R., 1907, 452.
 Morse, U. S. F. B. 390, 38, 1910.
- Sarcoptes mutans var. gallinae**
 Kaupp, Colo. B. 185, 8, 1912.
- Sarcoptes scabiei**
 Bentley, Tenn. Bd. Ent. R. f. '13, 32.
 Doane, Ins. Disease, 37, 1910.
 Herrick, Household Ins. 300, 1914.
 Melvin & Mohler, U. S. B. An. I. R., 1907, 263.
 Stevenson, U. S. B. An. I. B. 69, '05, 20.
 Washburn, Minn. P. B. 22, 24, 1905.
- Sarcoptes scabiei, see also Scabies**
- Sarcoptes scabiei equi**
 Law, U. S. B. An. I. R., 1907, 451.
 Herms, Cal. Cult., XLI, 292, 1913.
- Sarcoptes scabiei suis**
 Herms, Cal. Cult., XLI, 266, 1913.
- Sarcoptes spp.**
 Fisher, Ohio Bd. Agr. R. 60, 666, 1905.
- Sargaritis sp. on fern caterpillar**
 Chittenden, U. S. B. 125, 10, 1913.
- Sargaritis websteri**
 Hyslop, U. S. B. 95, 115, 1912.
- Saturnia pavonia**
 Felt, J. Ec. Ent. III, 342, 1910.
 Felt, N. Y. R. 26, 67, 1911.
- Saturniidae, Parasites of**
 Fiske & Thompson, J. Ec. Ent. II, 450, 1909.
- Saw-toothed grain-beetle, see Silvanus surinamensis**
- Sayomyia albipes**
 Smith, N. J. R., 1905, 687.
- Sayomyia punctipennis**
 Smith, N. J. R., 1905, 688.
- Scabies**
 Biddle, Jr. Mich. Med. Soc., V, 83, 1906.
 Blount, Tex. Med. News, XIV, 487, '05.
 Bowen, Bost. Med. Surg. Jr., CLIV, 624, 1906.
 Burke, Amer. Jr. Dermatol., XII, 451, 1908.
 Groat, N. Y. Med. Jr., LXXXII, 1220, 1905.
 Howe, Bost. Med. Surg. Jr., CLII, 723, 1905.
 Huntington, N. Y. Med. Jr., LXXXII, 1219, 1905.
 Hyde, Amer. J. Med. Sci., CXXIX, 453, 1905.
 Kaupp, Anim. Parasites, 57, 1908.
 Kimball, Providence Med. Jr., XII, 38, 1911.
 Kolmer, Jr. Cutan. Dis., June, '11, 339.
 Painter, Bost. Med. Surg. Jr., CLXXI, 54, 1914.
 Ruggles, Buffalo Med. Jr., VI, 113, '05.
 Schamberg, Pr. Path. Soc. Phila. XIV, 22, 1911.
 Schamberg, Jr. Cutan. Dis., Feb., 1912, 52.
 Schiller, Wis. Med. Jr., IV, 279, 1905.
 Stiles, Osler's Mod. Med., I, 627, 1907.
- Scale Insects**
 Smith, N. J. B. 181, 10, 1905.
 Surface, Pa. D. A. Zoöl. V, 2, 57, 1907.
 Surface, Pa. D. A. Zoöl. V, 7, 203, 1907.
 ——— Pa. D. A. Zoöl. IV, 11, 397, 1907.
- Scale insects, Fungus diseases of**
 Rolfs & Fawcett, Fla. B. 94, 5, 1908.
 Rolfs & Fawcett, Fla. B. 119, 71, 1913.
- Scale insects locomotion**
 Quayle, J. Ec. Ent. IV, 301, 1911.

Scale Insects of South Carolina

Gee, J. Ec. Ent. V, 484, 1912.

Scale Insects, *Spraying*

Worsham, J. Ec. Ent. IV, 193, 1911.

Scalecide

Britton, Conn. B. 165, 21, 1909.

Britton & Walden, Conn. R. 7, 282, '08.

Fernald, Mass. B. 116, 17, 1907.

Forbes, Ill. B. 107, 257, 1906.

Jarvis, Conn. Storrs B. 54, 178, 1908.

Pratt, N. Y. Fr. Grow. Assoc., '08, 92.

Smith, Ga. Bd. Ent. B. 21, 212, 1906.

Smith, N. J. R., 1905, 615, 620.

Smith, N. J. R., 1906, 587.

Smith, N. J. R., 1908, 364.

Worsham, Pr. Ga. Hort. Soc., 1908, 75.

—— Rur. N. Y., 1907, 781.

Scalecide vs. Lime-sulphur

Pratt, C. Gentl., 1907, 1039.

Scales on orchids

Whitney, Cal. Hort. B. II, 7, 582, 1913.

Scale-Skidoo

Smith, N. J. R., 1906, 596.

Scapteriscus didactylus

Holloway, U. S. C. 165, 5, 1912.

Reed, Ga. Hort. Soc. f. 1914, 58.

Worsham, J. Ec. Ent. II, 209, 1909.

Worsham & Reed, Ga. B. 101, 251, '12.

—— U. S. Y. B., 1908, 573.

Scaptomyza flaveola

Chittenden, Ins. Inj. Veg. 154, 1907.

Scatophaga stercoraria

Hewitt, Can. Ent., 1914, 2.

Scelodonta nebulosus

Pettit, Mich. B. 244, 214, 1907.

Scenopinus fenestralis

Howard, U. S. C. 71, 2, 1906.

Howard, U. S. F. B. 459, 7, 1911.

Scamberg's disease, see Pediculoides**Schedius kuvanae**

Burgess, U. S. F. B. 564, 7, 1914.

Fiske, Mass. For. R. 6, 90, 1910.

Howard, U. S. R. Ent., 1911, 10.

Howard, Mass. For. R. 8, 89, 1912.

Howard, Mass. For. R. 9, 71, 1912.

Howard, U. S. R. Ent., 1912, 10.

Howard, Mass. For. R. 10, 83, 1913.

Howard, U. S. R. Ent., 1913, 2.

Howard, Ann. Ent. Soc. Am. VII, 86, 1914.

Howard, U. S. R. Ent., 1914, 3.

Howard & Fiske, U. S. B. 91, 176, 1911.

Schistocerca alutacea

Forbes, Ill. Ent. R. 23, 140, 1905.

Schistocerca americana

Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 56.

Douglass, Ind. Ent. R. 1, 104, 1908.

Douglass, Ind. Ent. R. 2, 118, 1910.

Forbes, Ill. Ent. R. 23, 140, 1905.

Kelly, J. Agr. Res., II, 436, 1914.

Morgan, Tenn. Bd. Ent. R. f. 1910, 59.

Sanderson, Ins. Pests, 99, 1912.

Schistocerca shoshone

Morrill, Ariz. Comm. Agr. & Hort. R. 6, 42, 1914.

Schistocerca vaga

Morrill, Ariz. Comm. Agr. & Hort. R. 6, 42, 1914.

Schistoceros hamatus, see Amphicerus bicaudatus**Schizocerus ebenus**

Chittenden, Ins. Inj. Veg. 241, 1907.

Sanderson, Ins. Pests, 437, 1912.

Schizocerus privatus

Chittenden, Ins. Inj. Veg. 241, 1907.

Sanderson, Ins. Pests, 438, 1912.

Schizoneura americana

Brittain, Pr. Ent. Soc. B. C., 4, 16, 1914.

Cooley, Mont. B. 88, 89, 1912.

Cooley, Mont. B. 92, 57, 1912.

Felt, N. Y. R. 20, 406, 1905.

Felt, N. Y. St. Mus. Mem. 8, 177, 1905.

Gibson, Ont. Ent. Soc. R. 44, 20, 1914.

Melander, Wash. B. 74, 5, 1906.

Patch, Me. B. 181, 223, 1910.

Patch, Me. B. 203, 236, 1913.

Patch, Me. B. 220, 268, 1914.

Sanderson, N. H. R. 17-18, 349, 1906.

Stuart, Vt. R. 18, 310, 1905.

Woods, Me. B. 137, 291, 1906.

Schizoneura americana, parasite of

Patch, Me. B. 203, 252, 1913.

Schizoneura lanigera

Adams, Ark. B. 92, 9, 1907.

Alderman, Giddings & Rumsey, W. Va. C. 7, 24, 1913.

Ball, Deseret Farm. Mar. 23, 1905, 8.

Ball & Titus, Deseret Farm., May 6, 1911, 2.

Barre & Conradi, S. C. B. 141, 24, 1909.

Bartlett, S. W. Stockm., Jan. 16, '14, 18.

Beach, Iowa B. 127, 60, 1912.

Bethune, Ont. Agr. Coll. B. 158, 12, '07.

Schizoneura lanigera (Cont'd)

- Bremner, Cal. Hort. Comm. Destr. Ins. 21, 1910.
 Brittain, Pr. Ent. Soc. B. C. 4, 16, 1914.
 Britton, Conn. R. 11, 343, 1912.
 Brown, Nat'l Fr. Grow., Jan. 1908, 4.
 Buckley, Me. Dept. Agr. B., vol. X, 3, 3, 1911.
 Chandler, Mo. Hort. Soc., 1909, 353.
 Chandler, Mo. B. 102, 248, 1912.
 Chase, Ga. Bd. Ent. B. 38, 26, 1913.
 Clarke, Cal. Hort. Comm. Bien. R. 1, 371, 1905.
 Clarke, Ala. Poly. B. 139, 20, 1907.
 Coburn, Colo. Bd. Hort. R. f. 1907, 26, 1908.
 Conradi & Thomas, S. C. B. 143, 8, 1909.
 Cook, N. J. C. 34, 8.
 Cook, N. J. C. 35, 7.
 Cook, Cal. Cult., XXXVI, 663, 1911.
 Cook, Cal. Hort. B. I, 5, 172, 1912.
 Cooley, Mont. Hort. f. 1909-1910, 42.
 Cooley, Mont. B. 88, 90, 1912.
 Cooley, Mont. B. 92, 57, 1912.
 Cooley, & Swingle, Mont. C. 17, 125, '12.
 Cooper, Cal. Hort. Comm. Ins. & Insect. 9, 1905.
 Cunningham, Pr. Ent. Soc. B. C., 1, 20, 1911.
 Dacy, W. Va. R. 136, 199, 1912.
 Dean, Ga. Hort. Soc., 29th Meet., 46, 1905.
 Dean, South. Plant., June 1907, 551.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 29, 1913.
 Doten, Nev. B. 66, 26, 1908.
 Douglass, Ind. Ent. R. 1, 97, 1908.
 Douglass, Ind. Ent. R. 2, 101, 1910.
 Douglass, Ind. Ent. R. 3, 97, 1910.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 109, 1905.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 228, 1907.
 Essig, Cal. Hort. B. II, 1-2, 49, 1913.
 Essig, Cal. Hort. B. II, 11, 725, 1913.
 Fletcher, Ont. Ent. Soc. R. 36, 88, 1906.
 Fletcher, Ont. Ent. Soc. R. 37, 86, 1907.
 Fulton, Wright & Gregg, Pa. B. 110, '11.
 Funk, Pa. Dept. Agr. B. 152, 210, 1907.
 Garcia, N. Mex. B. 68, 37, 1908.
 Garcia, N. Mex. B. 75, 36, 1910.
 Garman, Ky. B. 133, 50, 1908.
 Gillette, U. S. B. 52, 58, 1905.
 Gillette, Colo. B. 114, 14, 15, 1906.
 Gillette, Colo. Fr. Grow., Apr. 1907, 3.
 Gillette, Colo. Fr. Grow., Mar. 1908, 6.
 Gillette, Colo. Fr. Grow., Apr. 1908, 19.
 Gillette, Colo. Fr. Grow., Sept. 1908, 22.
 Gillette, J. Ec. Ent. I, 306, 1908.
 Gillette, Better Fr., Feb. 1910, 18, 30.
 Gillette, Colo. Fr. Grow., July 1910, 14.
 Gillette, Colo. R. 24, 28, 1911.
 Gillette, Colo. R. 25, 30, 1912.
 Gillette & Taylor, Colo. B. 133, 5, 1908.
 Gillette & Taylor, Colo. B. 134, 4, 1908.
 Gillette & Taylor, Better Fr., Apr. 1909, 13.
 Gillette & Taylor, Colo. Fr. Grow., Apr. 1909, 3.
 Gossard, Ohio B. 164, 13, 1905.
 Gossard, Ohio B. 198, 42, 1908.
 Gossard, Ohio B. 233, 105, 1911.
 Gossard, Ohio Hort. Soc., 1912, 65.
 Haseman, Mo. Hort. Soc., 1911, 219.
 Headlee, Kans. Farm., May 8, 1909, 12.
 Herrick, Rur. N. Y., 1910, 164.
 Herrick, N. Y. Dept. Agr. B. 28, 71, '11.
 Herrick, Rur. N. Y., 1912, 187.
 Herrick, Rur. N. Y., 1912, 1264.
 Hewitt & Hayhurst, Ark. B., 109, 434, 1911.
 Hitchings, Me. Comm. Agr. R., 1906, 209, 1907.
 Hitchings, Me. Ent. R. 1, 19, 1906.
 Hitchings, Me. Comm. Agr. R., 1907, 298, 1908.
 Hitchings, Me. Ent. R. 2, 39, 1907.
 Hitchings, Me. Dept. Agr. Quart. B., vol. VII, 1, 30, 1908.
 Hitchings, Me. Ent. R. 3, 94, 1908.
 Hitchings, Me. Comm. Agr. R. 1910, 49, 1911.
 Hitchings, Me. Dept. Agr. B., vol. IX, 1, 13, 1910.
 Hitchings, Me. Ent. R. 5, 7, 1910.
 Hitchings, Me. Ent. R. 6, 7, 1911.
 Hodgkiss & Fulton, N. Y. St. C. 23, '13.
 Houser, O. Farm., Nov. 25, 1911, p. 479.
 Howard, U. S. Ent., R. 1912, 25.
 Jarvis, Conn. Storrs B. 56, 242, 1909.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 332.
 Johannsen & Patch, Me. B. 195, 236, 1911.

Schizoneura lanigera (Cont'd)

- Lamson, Conn. Storrs B. 71, 67, 1912.
 Latham, Prog. Farm., July 1, 1911, 590.
 Lewis, Ga. Bd. Ent. B. 30, 22, 1909.
 Lochhead, Ont. Agr. Coll. B. 144, 29, 1905.
 Lohrenz, J. Ec. Ent. IV, 162, 1911.
 McCue, Nat'l Fr. Grow., Mar. 1905, 32.
 Melander, The Ranch, Apr. 1, 1912, 7.
 Melander, Better Fr., June 1914, 39.
 Merrill, Farm & Ranch, June 20, 1914, 11.
 Merrill, S. W. Stockm., Mar. 13, '14, 9.
 Moore, Wis. R. 23, 234, 1906.
 Moore, Wis. R. 24, 374, 1907.
 Moore, Wis. B. 190, 22, 1910.
 Morgan, Tenn. Bd. Ent. R. f. 1908, 37.
 Morrill, S. W. Stockm., Jan. 20, 1911, 1.
 Morrill, S. W. Stockm., June 13, '13, 10.
 Morrill, S. W. Stockm., June 12, '14, 10.
 Morrison, Ind. Ent. R. 5, 210, 1912.
 Munson, Me. Dept. Agr. Quart. B., vol. IV, 1, 13, 1905.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 12, 7, 1907.
 O'Kane, Inj. Ins. 226, 1914.
 Parker, Mont. Hort. Soc., 1911, 57.
 Parrott, N. Y. Fr. Grow. Assoc., '06, 24.
 Parrott, N. Y. Fr. Grow. Assoc., '13, 46.
 Patch, J. Ec. Ent. V, 395, 1912.
 Patch, Me. B. 203, 236, 1913.
 Patch, Me. B. 217, 173, 1914.
 Patch, Me. B. 220, 264, 1914.
 Paull, Colo. Fr. Grow., July 1907, 6.
 Peairs, Md. Hort. Soc., 1908, 63, 1909.
 Pearson, Better Fr., Dec. 1909, 70.
 Price, Va. C. 7, 28, 1909.
 Rosenfeld, La. Hort. Soc., 1908, 108.
 Rumsey, W. Va. R. f. 1904-1905, 13.
 Rumsey, W. Va. Hort. Soc. 13th R., 52, 1906.
 Rumsey, W. Va. Hort. Soc. 14th R., 31, 1907.
 Rumsey, U. S. B. 67, 31, 1907.
 Rumsey & Brooks, W. Va. R. f. 1905-1906, 22.
 Rumsey & Brooks, W. Va. R. f. 1907-1908, 21.
 Rumsey & Brooks, W. Va. B. 116, 240, 1908.
 Sanders, Wis. B. 227, 19, 1912.
 Sanders, Ins. Pests, 582, 1912.
 Shaw, Ohio Bd. Agr. R. 63, 1908, 695.
 Shaw, O. Nurs. Orch. Insp. R. 7, 17, '09.
 Shaw, O. Bd. Agr. R. 64, 1909, 630.
 Slingerland, Rur. N. Y., 1907, 40.
 Slingerland, Rur. N. Y., 1908, 80.
 Slingerland, Rur. N. Y., 1909, 84.
 Slingerland & Crosby, Man. Fr. Ins. 153, 1914.
 Smith, Ga. Bd. Ent. B. 20, 166, 1906.
 Smith, Ga. Bd. Ent. B. 23, 7, 31, 1907.
 Smith, Pr. Ga. Hort. Soc., 1907, 149.
 Smith, U. S. B. 67, 104, 1907.
 Smith, Better Fr., Sept. 1908, 27.
 Smith, Nebr. Bd. Agr. R. f. 1908, 231.
 Smith, N. C. B. 206, 45, 1910.
 Smith, N. C. R. 33, 32, 1910.
 Smith & Lewis, U. S. B. 60, 78, 1906.
 Stene, R. I. Bd. Agr. R. 21, 47, 1906.
 Stene, R. I. Nurs. Insp., 31, 1906.
 Stewart, Pa. B. 128, 125, 1914.
 Stewart, C. Gentl., May 10, 1913, 743.
 Surface, Pa. D. A. Zoöl. B. II, 10 & 11, 326, 1905.
 Surface, Pa. D. A. Zoöl. V. 12, 371, 1908.
 Surface, Pa. Dept. Agr. R. 16, 117, 1910.
 Surface, Pa. D. A. Zoöl. I, 1, 16, 1911.
 Swaine, Ont. Ent. Soc. R. 41, 88, 1911.
 Swaine, Ont. Ent. Soc. R. 42, 72, 1912.
 Symons, Md. B. 101, 126, 1905.
 Symons, U. S. B. 60, 84, 1906.
 Symons, Md. Hort. Soc., 1909, 169, 1910.
 Symons & Cory, Md. B. 175, 174, 1913.
 Symons, & Gahan, Md. Hort. Soc., 1904, 36, 1905.
 Taylor, Colo. B. 119, 14, 1906.
 Taylor, Colo. Fr. Grow. Mar., 1907, 15.
 Titus, Deseret Farm., May 1, 1909, 14.
 Treherne, Ont. Ent. Soc. R. 41, 20, 1911.
 Treherne, Pr. Ent. Soc. B. C., 4, 22, '14.
 Troop, Ind. Bd. Agr. R. 55, 475, 1907.
 Volck, Cal. Fr. Grow., Jan. 8, 1910, 5.
 Volck, Pac. Rur. Press, LXXIX, 144, '10.
 Webster, J. Ec. Ent. II, 211, 1909.
 Weldon, Md. Hort. Soc., 1907, 64, 1908.
 Whiteside, Mont. Bd. Hort. f. 1907-1908, 31, 1909.
 Wilson, Oreg. Circ. B. 12, 6, 1909.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 87.
 Woodworth, Cal. C. 102, 1913.
 Woodworth, Conn. Farm., July 12, 1912, 6.

Schizoneura lanigera (*Cont'd*)

- Worsham, J. Ec. Ent. II, 208, 1909.
 Young, Ont. Ent. Soc. R. 36, 8, 1906.
 ——— Colo. Bd. Hort. R. f. 1909, 145.
 ——— Mont. Bd. Hort. f. 1903-1904,
 103, 1905.
 ——— Pac. Rur. Press, LXXI, 115,
 283, 1906.
 ——— Pac. Rur. Press, LXXIII, 180,
 1907.
 ——— Pac. Rur. Press, LXXVII, 223,
 1909.
 ——— Pac. Rur. Press, LXXXVIII, 75,
 1914.
 ——— Rur. N. Y., 1905, 534.
 ——— Rur. N. Y., 1907, 81.
 ——— Wyo. Bd. Hort. 3rd Bien. R., 31,
 1909-1910.
 ——— Wyo. Bd. Hort. Sp. B., I, 4, 21,
 1911.

Schizoneura lanigera, *parasite of*

- Neff, Colo. Fr. Grow., Apr. 1909, 10.

Schizoneura lanuginosa

- Patch, Me. B. 220, 263, 1914.

Schizoneura pinicola

- Felt, N. Y. R. 25, 80, 1910.
 Patch, Me. B. 187, 20, 1911.

Schizoneura rileyi

- Felt, N. Y. St. Mus. Mem. 8, 192, 1905.
 Gibson, Ont. Ent. Soc. R. 44, 20, 1914.
 Patch, Me. B. 181, 235, 1910.
 Patch, Me. B. 220, 260, 1914.
 Williams, Ont. Ent. Soc. R. 40, 15, 1910.

Schizoneura tessellata, *see Pemphigus***Schizoneura ulmi**

- Felt, N. Y. R. 25, 79, 1910.
 Patch, J. Ec. Ent. VI, 316, 1913.
 Patch, Me. B. 220, 271, 1914.

Schizoprymus phillipsi

- Phillips, U. S. B. 95, 9, 1911.

Schizura concinna

- Baldwin, Ind. Ent. R. 5, 78, 1912.
 Berger, Fla. R., 1907, XLI.
 Bethune, Ont. Agr. Coll. B. 158, 9, 1907.
 Bremner, Cal. Hort. Comm. Destr.
 Ins. 11, 1910.
 Dean & Peairs, Kans. Agr. Educ. VI, 2,
 46, 1913.
 Ehrhorn, Cal. Hort. Comm. Bien. R. 2,
 226, 1907.
 Essig, Cal. Hort. B. II, 1-2, 188, 1913.
 Felt, N. Y. R. 20, 403, 1905.

- Felt, N. Y. R. 22, 45, 1907.

- Felt, U. S. B. 67, 39, 1907.
 Felt, N. Y. R. 23, 31, 1908.
 Felt, N. Y. R. 27, 99, 1912.
 Garman, Ky. B. 133, 45, 1908.
 Gossard, Ohio B. 233, 94, 1911.
 Haseman, Mo. Hort. Soc., 1911, 242.
 Hitchings, Me. Comm. Agr. R., 1906,
 213, 1907.
 Hitchings, Me. Ent. R. 2, 43, 1907.
 Hitchings, Me. Ent. R. 5, 14, 1910.
 Hoyt, Cal. Cult., XLI, 286, 1913.
 Johannsen & Patch, Me. Comm. Agr.
 R. f. 1910, 344.
 Johannsen & Patch, Me. B. 195, 241, '11.
 Lamson, Conn. Storrs B. 71, 77, 1912.
 O'Kane, Inj. Ins. 271, 1914.
 Patch, Me. B. 108, 164, 1905.
 Patch, Me. B. 123, 213, 1905.
 Patch, Me. B. 134, 224, 1906.
 Rumsey & Brooks, W. Va. R. f. 1907-
 1908, 20.
 Rumsey & Brooks, W. Va. B. 116, 238,
 1908.
 Sanderson, N. H. R. 17-18, 325, 1906.
 Sanderson, U. S. B. 60, 75, 1906.
 Sanderson, Ins. Pests, 615, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 125,
 1914.
 Stuart, Vt. R. 18, 310, 1905.
 Symons, Md. B. 101, 141, 1910.
 Treherne, Pr. Ent. Soc. B. C., 4, 25, '14.
 Vosler, Cal. Hort. B. II, 9, 654, 1913.
 Weldon, Md. Hort. Soc., 1907, 63, 1908.
 Wilson, Oreg. Bien. Crop Pest R. f.
 1911-1912, 156.
 Wilson, Pr. Ent. Soc. B. C. 2, 6, 1912.
 Woods, Me. B. 137, 288, 1906.
 ——— U. S. Y. B., 1906, 512.
 ——— U. S. Y. B., 1907, 549.

Schizura unicornis

- Day, Pr. Ent. Soc. B. C. 2, 40, 1912.
 Garman, Ky. B. 133, 43, 1908.
 Gossard, Ohio B. 233, 94, 1911.
 ——— C. Gentl., 1909, 775.

Schnarr's compound

- Worsham, Pr. Ga. Hort. Soc., 1908, 75.

Sciaphilus muricatus

- Patch, Me. B. 123, 215, 1905.

Sciapteron regale

- Maskew, Cal. Hort. B. II, 10, 677,
 1913.

- Sciara agraria*
Popenoe, U. S. C. 155, 2, 1912.
- Sciara inconstans*
Chittenden, U. S. B. 64, 36, 1908.
Davis, J. Ec. Ent. III, 181, 1910.
Davis, Ill. Hort. Soc. f. 1910, 33, 1911.
Tucker, Kans. Farm., Sept. 14, '05, 945.
—— U. S. Y. B., 1907, 551.
—— U. S. Y. B., 1908, 578.
- Sciara multiseta*
Popenoe, U. S. C. 155, 1, 1912.
Smith, N. J. R., 1908, 338.
- Sciara sciophila*
Houser, J. Ec. Ent. V. 399, 1912.
- Sciara sp.*
Hart, Ill. Ent. R. 26, 95, 1911.
Sanderson, Ins. Pests, 300, 1912.
Slingerland, Rur. N. Y., 1905, 536.
Swenk, Nebr. Bd. Agr. R. f. 1909, 243.
- Sciara tritici*
—— U. S. Y. B., 1907, 551.
—— U. S. Y. B., 1908, 578.
- Sciara vulgaris*
Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 197.
—— U. S. Y. B., 1907, 551.
- Scirtothrips citri*, *see* *Euthrips citri*
- Scolioneura capitalis*
Bethune, Ont. Ent. Soc. R. 39, 134, '09.
Caesar, Ont. Ent. Soc. R. 40, 18, 1910.
Houghton, Ent. News, 1908, 212.
Houghton, Del. B. 87, 10, 1910.
- Scoliapteryx libatrix*
Garman, Ky. B. 120, 62, 1905.
- Scolopendra morsitans*
Herrick, Household Ins. 413, 1914.
- Scolopendrella immaculata*
Davis, Ill. Ent. R. 27, 138, 1912.
- Scolopendrella sp.*
Woodworth, Cal. Fr. Grow., June 10, 1905, 1.
- Scolothrips sexmaculata*
Chittenden, U. S. C. 104, 6, 1909.
Ewing, Oreg. B. 121, 55, 1914.
McGregor, U. S. C. 150, 9, 1912.
McGregor, U. S. C. 172, 16, 1913.
McGregor, J. Ec. Ent. VII, 331, 1914.
Quayle, Cal. B. 234, 513, 1912.
Quayle, J. Ec. Ent. VI, 87, 1913.
- Scolytid in apple*
Garman, Ky. B. 133, 49, 1908.
- Scolytus liminaris*
Parrott, N. Y. Fr. Grow. Assoc., '12, 209.
- Scolytus multistriatus*
Burgess, J. Ec. Ent. V, 173, 1912.
Chapman, Psyche, 1910, 63.
Marlatt, J. Ec. Ent. V, 76, 1912.
Smith, N. J. R., 1910, 342.
- Scolytus quadrispinosus*
Bird, Jr. N. Y. Ent. Soc. XXI, 123, '13.
Britton, Conn. R. 11, 341, 1912.
Britton, Conn. Farm., Sept. 27, 1913, 3.
Britton & Walden, Conn. R. 13, 237, '14.
Felt, N. Y. St. Mus. Mem. 8, 275, 1905.
Felt, N. Y. R. 25, 103, 1910.
Felt, N. Y. R. 27, 110, 1912.
Felt, N. Y. R. 28, 63, 1913.
Felt, J. Ec. Ent. VII, 374, 1914.
Gossard, Fla. B. 79, 309, 1905.
Headlee, N. J. Bd. Agr. R. 41, 237, 1914.
Hopkins, U. S. Y. B., 1907, 163.
Hopkins, U. S. B. 58, 78, 1909.
Hopkins, U. S. B. 58, 60, 1909.
Hopkins, U. S. C. 125, 3, 1910.
Hopkins, U. S. C. 144, 1, 1911.
Levison, J. Ec. Ent. II, 363, 1909.
Loomis, Rur. N. Y., 1913, 446.
Smith, N. J. R., 1910, 347.
—— U. S. Y. B., 1905, 632.
- Scolytus rugulosus*
Alderman, Giddings & Rumsey, W. Va. C. 7, 30, 1913.
Baldwin, Ind. Ent. R. 5, 97, 1912.
Baldwin, Farm. Guide, Feb. 7, 1914, 16.
Becker, Proc. Ark. Hort. Soc., 1912-1913, 29.
Bethune, Ont. Agr. Coll. B. 158, 18, '07.
Bethune, Ont. Agr. Coll. R. 34, 32, 1909.
Buckley, Me. Dept. Agr. B., vol. X, 3, 5, 1911.
Burgess, O. Bd. Agr. R. 61, 658, 1906.
Burgess, O. Nurs. Orch. Insp. R. 5, 18, 1907.
Caesar, Can. Hort. XXXI, 110, 1908.
Caesar, Farm & Dairy, Can., Mar. 4, 1909, 13.
Caesar, Ont. Ent. Soc. R. 40, 18, 1910.
Caesar, Ont. Ent. Soc. R. 44, 51, 1914.
Chandler, Mo. Hort. Soc., 1909, 360.
Chandler, Mo. B. 102, 251, 1912.
Close & Ballard, Md. B. 159, 190, 1911.
Conradi, Tex. Stockm. Farm., Feb. 22, 1905, 6.

- Conradi, U. S. B. 60, 68, 1906.
 Conradi & Thomas, S. C. B. 143, 7, '09.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 16, 1913.
 Douglass, Ind. Ent. R. 1, 154, 1908.
 Douglass, Ind. Ent. R. 3, 100, 1910.
 Douglass, Ind. Ent. R. 4, 45, 127, 1912.
 Essig, Cal. Hort. B. II, 9, 658, 1913.
 Felt, N. Y. R. 20, 403, 1905.
 Felt, N. Y. St. Mus. Mem. 8, 453, 1906.
 Felt, N. Y. R. 25, 89, 1910.
 Felt, N. Y. R. 28, 93, 1913.
 Fulton, Wright & Gregg, Pa. B. 110, 30, 1911.
 Funk, Pa. Dept. Agr. B. 152, 216, 1907.
 Gardner, Me. Comm. Agr. R. 1913, 60, 1914.
 Garman, Ky. B. 133, 50, 1908.
 Gossard, Ohio B. 164, 19, 1905.
 Gossard, Ohio B. 198, 51, 1908.
 Gossard, Ohio P. B. 301, 1908.
 Gossard, Ohio Hort. Soc., 1909, 81.
 Gossard, Ohio B. 233, 97, 123, 1911.
 Gossard, Ohio B. 264, 6, 1913.
 Gossard, Ohio C. 140, 1, 1914.
 Haseman, Mo. Hort. Soc., 1911, 223.
 Herrick: N. Y. Fr. Grow. Assoc., '12, 44.
 Hewitt & Hayhurst, Ark. B. 109, 435, 1911.
 Jarvis, Conn. Storrs B. 56, 259, 1909.
 Lochhead, Syn. Ec. Ent. 82, 1914.
 Newell, Tex. Stockm. Farm., May 1, 1912, 13.
 Niven, S. C. C. 21, 10, 1913.
 O'Kane, Inj. Ins. 241, 1914.
 Parrott, N. Y. Fr. Grow. Assoc., '12, 209.
 Peairs, Md. Hort. Soc., 1908, 63, 1909.
 Popenoe, Kans. Farm., Sept. 27, '06, 987.
 Quaintance, U. S. Y. B., 1905, 346.
 Quaintance, Better Fr., June 1909, 21.
 Quaintance, Pr. Ent. Soc. Wash. X, 122, 1909.
 Rosenfeld, La. Hort. Soc., 1908, 112.
 Rosenfeld, J. Ec. Ent. III, 215, 1910.
 Rumsey, W. Va. Hort. Soc. 14th R., 31, 1907.
 Rumsey & Brooks, W. Va. R. f. 1905-1906, 25.
 Rumsey & Brooks, W. Va. R. f. 1907-1908, 17.
 Rumsey & Brooks, W. Va. B. 116, 234, 1908.
 Sanborn, Okla. R. 21, 27, 1912.
 Sanderson, Ins. Pests, 544, 1912.
 Sargent, Ala. Hort. Soc. R. 2, 30, 1905.
 Scott, Ohio Hort. Soc., 1910, 63.
 Slingerland & Crosby, Man. Fr. Ins. 277, 1914.
 Smith, N. J. Ent. C. 27.
 Smith, Ga. Bd. Ent. B. 17, 87, 1905.
 Smith, South. Cult., Aug. 1, 1905, 19.
 Smith, Ga. Bd. Ent. B. 20, 165, 1906.
 Smith, N. J. R., 1909, 416.
 Smith, N. C. B. 206, 55, 1910.
 Smith, N. J. B. 235, 36, 1911.
 Smith & Lewis, U. S. B. 60, 77, 1906.
 Stedman, Mo. Hort. Soc., 1905, 57.
 Surface, Pa. Dept. Agr. R. 13, 503, 1907.
 Surface, Pa. D. A. Zool. I. 4, 167, 1911.
 Swaine, Ont. Ent. Soc. R. 40, 58, 1910.
 Swaine, Ont. Soc. R. 41, 92, 1911.
 Swenck, Nebr. Hort. Soc., 1909, 106.
 Symons, Md. B. 101, 129, 146, 1905.
 Treherne, Ont. Ent. Soc. R. 41, 20, 1911.
 Treherne, Ont. Ent. Soc. R. 42, 23, 1912.
 Tucker, Kans. Farm., June 15, '05, 623.
 Twigg, Kans. Hort. Soc., 1911, 319.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 481, 1911.
 Weiss, N. J. R., 1912, 433.
 Williams & Price, Ala. Poly. B. 156, 125, 1911.
 Wilson, Ohio C. 89, 4, 1909.
 Worsham, J. Ec. Ent. II, 207, 1909.
 ——— Va. Agr. R. f. 1909, 77, 1909.
- Scolytus subscaber**
 Burke, Pr. Ent. Soc. Wash. IX, 115, '08.
- Scopelosoma tristigmata**
 Treherne, Can. Exp. Farms Ent. B. 8, 44, 1914.
- Scorpions**
 Herrick, Household Ins. 360, 1914.
- Scorpion poison**
 Jackson, Interstate Med. Jr., July, 1910, 485.
- Scotobates calcaratus**
 Felt, N. Y. St. Mus. Mem. 8, 493, 1906.
- Screw-worm, see Chrysomyia macellaria**
- Scudderella septentrionalis**
 Britton, Conn. R. 6, 274, 1907.
- Scudderella sp. in corn**
 Forbes, Ill. Ent. R. 23, 143, 1905.
- Scudderella spp. on tobacco**
 Metcalf, N. C. Dept. Agr. Sp. B., 61, '09.

Scudderia texensis

- Britton, Conn. R. 6, 274, 1907.
 Headlee, N. J. Bd. Agr. R. 41, 236, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 467, 1914.
 Smith, N. J. R., 1908, 341.

Scurfy scale, see Chionaspis furfura**Scutellista cyanea**

- Austin, Cal. Hort. Comm. C. Nov. 1905, 11.
 Barry, Cal. Hort. Comm. Bien. R. 1, 155, 1905.
 Barry, Cal. Hort. Comm. Bien. R. 2, 273, 1907.
 Bemis, Rur. Calif., Oct. 1907, 374.
 Bemis, Rur. Calif., Sept. 1908, 295.
 Bemis, Cal. Cult., XXXV, 43, 1910.
 Cooper, Cal. Hort. Comm. Bien. R. 2, 9, 1907.
 Cowan, Farm & Ranch, July 2, 1910, 3.
 Day, Cal. Cult., XXV, 55, 1905.
 Ehrhorn, Cal. Hort. Comm. C. Nov. 1905, 2.
 Essig, Cal. Hort. B. II, 1-2, 270, 1913.
 Howard, U. S. R. Ent., 1905, 283.
 Howard, U. S. R. Ent., 1906, 8.
 Howard & Fiske, U. S. B. 91, 31, 1911.
 Isaac, Bug vs. Bug, 17, 1906.
 Maskew, Cal. Cult., XXV, 224, 1905.
 Payne, Cal. Fr. Grow., May 20, '05, 4.
 Pease, Cal. Hort. Comm. C. Nov. '05, 8.
 Pease, Cal. Hort. Comm. C. Feb. '06, 6.
 Quayle, J. Ec. Ent. III, 446, 1910.
 Quayle, Cal. B. 214, 456, 1911.
 Quayle, Cal. B. 223, 179, 1911.
 Quayle, J. Ec. Ent. IV, 512, 515, 1911.
 Vosler, Cal. Hort. B. II, 9, 660, 1913.
 Woglum, U. S. B. 90, 77, 1912.
 Youngstrom, Cal. Fr. Grow., Sept. 22, 1906, 3.
 Cal. Fr. Grow., Feb. 4, 1905, 14.

Scutigera forceps

- Felt, N. Y. St. Mus. B. 129, 23, 1909.
 Felt, N. Y. St. Mus. B. 136, 28, 1912.
 Howard, U. S. C. 71, 9, 1906.
 Howard, U. S. F. B. 459, 15, 1911.
 Herrick, Household Ins. 356, 1914.
 Hewitt, Can. Ent., 1914, 219.
 Marlatt, U. S. F. B., 627, 1914.
 Smith, N. J. B. 203, 41, 1907.
 Surface, Pa. D. A. Zoöl. III, 1, 24, 1913.
 Whitmarsh, Ohio B. 253, 134, 1912.

Scymnus bipunctatus

- Smith, Cal. Hort. B. III, 11, 535, 1914.

Scymnus guttulatus

- Bremner, Cal. Hort. Comm. Destr. Ins., 1910, 32.
 Essig, Pom. Jr. Ent. III, 395, 1911.
 Essig, Cal. Hort. B. II, 1-2, 218, 1913.
 Essig, Cal. Hort. B. III, 3, 131, 1914.

Scymnus intrusus

- Garrett, La. B. 121, 16, 1910.

Scymnus loewii

- Sanborn, Okla. B. 98, 13, 1912.

Scymnus lophanthae, see Rhizobius**Scymnus marginicollis**

- Schwarz, U. S. B. 54, 75, 1905.
 Essig, Cal. Hort. B. II, 1-2, 219, 1913.
 Essig, Cal. Hort. B. III, 3, 1914.
 Quayle, Cal. B. 214, 469, 1911.
 Quayle, Cal. B. 226, 338, 1912.
 Smith, U. S. B. 52, 75, 1905.

Scymnus nebulosus

- Essig, Cal. Hort. B. II, 1-2, 219, 1913.
 Essig, Cal. Hort. B. III, 3, 132, 1914.

Scymnus punctatus

- Morrill & Back, U. S. B. 102, 9, 1912.

Scymnus punctum

- Chittenden, U. S. C. 104, 6, 1909.
 Webster, U. S. C. 158, 5, 1912.
 Weldon, Colo. B. 152, 12, 1909.

Scymnus sp.

- Britton, Conn. B. 181, 6, 1914.
 Sanborn, Okla. B. 100, 26, 1912.

Scymnus sordidus

- Essig, Pom. Jr. Ent. III, 520, 610, 1911.
 Essig, Cal. Hort. B. I, 7, 288, 1912.
 Essig, Cal. Hort. B. II, 1-2, 218, 1913.
 Essig, Cal. Hort. B. III, 3, 132, 1914.

Scymnus vagans

- Isaac, Bug vs. Bug, 13, 1906.

Sealed carton for cereals

- Parker, U. S. D. A. B. 15, 1913.

Searcher, see Calosoma scrutator**Security Carbolyzed Disinfectant**

- U. S. D. A. Ins. & Fung. No. 101, 1913.

Seed-corn maggot, see Pegomyia fuscipes**Seius pomi**

- Ewing, Oreg. B. 121, 53, 1914.
 Parrott, Hodgkiss & Schoene, N. Y. St. B. 283, 302, 1906.

Seius sp.

- Felt, N. Y. R. 28, 112, 1913.

- Selandria barda*, *see* *Tomostethus*
Selandria obsoletum
 Britton, Conn. Exp. Sta. R. 7, 286, '08.
Selandria cerasi, *see* *Caliroa*
Selandria rubi, *see* *Monophadnoides*
Selandria vitis
 O'Kane, Inj. Ins. 287, 1915.
Selenaspidius articulatus
 Berger, Fla. R. 1907, XXXVIII.
 Berger, Fla. R. LVII, 1911.
 Morrill, Fla. Fr. Grow., Feb. 17, 1911, 8.
 Morrill, J. Ec. Ent. IV, 277, 1911.
Semasia nigricans, *see* *Cydia*
Semicolon butterfly, *see* *Polygonia interrogationis*
Semi-looping maple worm, *see* *Homoptera lunata*
Semiotellus isosomatis
 Webster, U. S. C. 106, 8, 1909.
Sepsis violacea
 Howard, U. S. C. 71, 3, 1906.
 Howard, U. S. F. B. 459, 7, 1911.
Serica anthracina
 Essig, Cal. Hort. B. II, 8, 622, 1913.
Serica fimbriata
 Pease, Cal. Cult., XXXIII, 42, 1909.
 ——— Cal. Cult., XXIV, 581, 1905.
 ——— Pac. Rur. Press, LXXXV, 661, 1913.
Serica iricolor
 Smith, N. J. R., 1911, 443.
Serica trociformis
 Felt, N. Y. St. Mus. Mem. 8, 514, 1906.
Sericoris bipartitana, *see* *Olethreutes*
Sericothrips apteris
 Crawford, Cal. Cult., XXXIV, 360, '10.
Serpentine leaf-miner, *see* *Agromyza pusilla*
Serropalpus barbatus
 Felt, N. Y. St. Mus. Mem. 8, 671, 1906.
Sesia acerni
 Baldwin, Farm. Guide, Jan. 3, 1914, 2.
 Baldwin, Ind. Ent. R. 6, 46, 1914.
 Felt, N. Y. St. Mus. Mem. 8, 56, 1905.
 Forbes, Ill. B. 151, 497, 1911.
 Forbes, Ill. Ent. R. 26, 35, 1911.
 Smith, N. J. B. 181, 32, 1905.
Sesia albicornis
 Felt, N. Y. St. Mus. Mem. 8, 469, 1906.
Sesia bolteri
 Felt, N. Y. St. Mus. Mem. 8, 470, 1906.
Sesia corni
 Felt, N. Y. St. Mus. Mem. 8, 456, 1906.
Sesia corusca
 Rosenfeld, J. Ec. Ent. III, 216, 1910.
Sesia pictipes, *see* *Synanthedon*
Sesia pyri
 Gossard, Ohio B. 233, 115, 1911.
 Slingerland & Crosby, Man. Fr. Ins. 232, 1914.
Sesia rubristigma
 Felt, N. Y. St. Mus. Mem. 8, 437, 1906.
Sesia rutilans
 Essig, Cal. Hort. B. II, 1-2, 190, 1913.
 O'Kane, Inj. Ins. 234, 1914.
 Slingerland & Crosby, Man. Fr. Ins. 384, 1914.
 Wilson, Oreg. Bien. Crop Pest. R. f. 1911-1912, 133.
Sesia scitula
 Barre & Conradi, S. C. B. 141, 44, 1909.
 Chittenden, Nut Grow., Feb. 1906, 119.
 Felt, N. Y. St. Mus. Mem. 8, 451, 1906.
 Forbes, Ill. B. 151, 499, 1911.
 Forbes, Ill. Ent. R. 26, 37, 1911.
 Gossard, Fla. B. 79, 299, 1905.
 Williams, Ala. Poly. B. 155, 48, 565, '11.
 Worsham, Ga. Bd. Ent. B. 33, 120, 1910.
Sesia tepperi
 Smith, U. S. B. 67, 105, 1907.
Sesia tipuliformis
 Baldwin, Ind. Ent. R. 5, 126, 1912.
 Caesar, Ont. Ent. Soc. R. 42, 31, 1912.
 Caesar, Ont. Dept. Agr., Fr. B. 222, 34, 1914.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 104, 1913.
 Essig, Cal. Hort. B. II, 1-2, 191, 1913.
 Gillette, Colo. B. 114, 23, 1906.
 Gillette, Better Fr., Feb. 1910, 23.
 Gossard, Ohio B. 164, 24, 1905.
 Hedrick, Mass. Bd. Agr. C. 14, 7, 1914.
 Hitchings, Me. Ent. R. 5, 4, 1910.
 Lochhead, Ont. Ent. Soc. R. 40, 73, 191.
 Lochhead, Syn. Ec. Ent. 58, 1914.
 O'Kane, Inj. Ins. 243, 1914.
 Sanderson, Ins. Pests, 477, 1912.
 Slingerland & Crosby, Man. Fr. Ins. 339, 1914.
 Surface, Pa. D. A. Zool. III, 1, 11, 1913.
 Swaine, Ont. Ent. Soc. R. 41, 95, 1911.
 Symons, Md. B. 101, 155, 1905.
 Treherne, Pr. Ent. Soc. B. C., 4, 27, '14.

Shade tree insects

- Brues, Wis. Hort. Soc. R. f. 1906, 13.
 Felt, N. Y. St. Mus. Mem. 8, 1906.
 Felt, N. Y. R. 21, 95, 105, 1906.
 Fernald, Mass. B. 125, 49, 1908.
 Forbes, Ill. B. 151, 1911.
 Gardner, Me. Comm. Agr. R., 1912, 55.
 Smith, N. J. B. 181, 1905.
 Smith, N. J. R., 1905, 533.
 Smith, N. J. R., 1906, 525, 561.
 Smith, N. J. R., 1907, 416.
 Smith, N. J. R., 1910, 338.
 Smith, N. J. R., 1911, 427.
 Stone & Fernald, Mass. B. 123, 28, 1908.
 Volck, Pac. Rur. Press, LXXXII, 560, 1911.
 Volck, Cal. Fr. Grow., June 15, 1912, 4.
 Weiss, N. J. R., 1912, 423.

Shagreened cutworm, see *Feltia malefida***Sheep bot fly, see *Oestrus ovis*****Sheep flies**

- Leslie, Nat'l Stockm. & Farm., July 28, 1910, 8.
 Reynolds, Mich. Farm, May 22, '09, 559.

Sheep insects

- Sapp, Farm. Guide, July 25, 1914, 5.
 Van Alstyne, Rur. N. Y., 1907, 631.
 Wheeler, Farm. Guide, July 7, 1906, 13.

Sheep louse, see *Trichodectes sphaerocephalus***Sheep maggots**

- Farm. Guide, May 20, 1905, 16.

Sheep scab-mite, see *Psoroptes communis***Sheep tick, see *Melophagus ovinus*****Sherwin-Williams Dry Powdered Arsenate of Lead**

- U. S. D. A. Ins. & Fung. No. 144, 1914.

Sherwin-Williams Strictly Pure Paris Green

- U. S. D. A. Ins. & Fung. No. 83, 1913.

Shining excrement fly, see *Morellia micans***Shoo-Fly, The Animal's Friend**

- U. S. D. A. Ins. & Fung. No. 39, 1912.

Shore pine hylesinus, see *Hylesinus sericeus***Short-nosed ox-louse, see *Haematopinus eurytarnus*****Short-winged mole-cricket, see *Scapteriscus abbreviatus*****Shot-borer, see *Xyleborus dispar*****Shot-hole borer, see *Scolytus rugulosus*****Sibine stimulea**

- Felt, N. Y. R. 21, 94, 1906.
 Felt, N. Y. St. Mus. Mem. 8, 528, 1906.
 Forbes, Ill. Ent. R. 23, 173, 1905.
 Garman, Ky. B. 133, 45, 1908.
 Herrick, Household Ins. 430, 1914.
 Newell, Farm & Ranch, Oct. 24, 1914, 11.
 O'Kane, Inj. Ins. 183, 1914.
 Smith, U. S. B. 67, 105, 1907.
 Tucker, Kans. Farm., May 18, '05, 527.
 ——— C. Gentl., 1908, 812.
 ——— U. S. Y. B., 1905, 633.

Sigalphus curculionis

- Brooks, W. Va. R. f. 1909-'10, 137, 190.
 Conradi & Thomas, S. C. B. 143, 27, '09.
 Hunter & Hinds, U. S. B. 51, 145, 1905.
 Hunter & Pierce, U. S. B. 114, 142, 1912.
 Johnson & Girault, U. S. C. 73, 6, 1906.
 Pierce, U. S. B. 73, 29, 38, 1908.
 Pierce, U. S. B. 100, 53, 1912.
 Quaintance & Jenne, U. S. B. 103, 142, 1912.

Sigalphus curculionis var. rufus

- Quaintance & Jenne, U. S. B. 103, 146, 1912.

Signiphora occidentalis

- Essig, Cal. Hort. B. II, 1-2, 277, 1913.
 Quayle, Cal. B. 222, 137, 1911.
 Quayle, J. Ec. Ent. IV, 511, 1911.

Signiphora pulchra

- Zimmer, U. S. B. 97, 120, 1912.

Sigalphus sp.

- Ainslie, U. S. B. 85, 141, 1910.

Sigalphus virginiensis

- Smith, N. J. B. 225, 16, 1909.

Silpha bituberosa

- Cooley, Mont. R. 12, 261, 1906.
 Cooley, Mont. B. 92, 60, 1912.
 Fletcher, Can. Exp. Farms B. 52, 44, '05.

Silpha opaca

- Cooley, Mont. R. 12, 262, 1906.

Silvanus imbellis

- Felt, N. Y. St. Mus. Mem. 8, 489, 1906.

Silvanus mercator

- U. S. Y. B., 1908, 579.

Silvanus surinamensis

- Bethune, Ont. Agr. Coll. R. 37, 28, 1912.
 Dean, Kans. Agr. Educ. I, 4, 49, 1909.
 Dean, Kans. B. 189, 202, 1913.
 Dietz, Ind. Ent. R. 6, 91, 1914.

- Felt, N. Y. St. Mus. B. 129, 38, 1909.
 Felt, N. Y. St. Mus. B. 136, 43, 1912.
 Girault, Ill. B. 176, 59, 1912.
 Girault, Ill. Ent. R. 27, 68, 1912.
 Gossard, Ohio B. 233, 85, 1911.
 Herrick, Household Ins. 236, 1914.
 Hinds, Ala. Poly. B. 176, 1914.
 O'Kane, Inj. Ins. 364, 1914.
 Parker, U. S. D. A. B. 15, 2, 1913.
 Sanderson, Ins. Pests, 187, 1912.
 Smith, N. J. B. 203, 31, 1907.
 Smith, N. C. B. 203, 13, 1909.
 Surface, Pa. D. A. Zoöl. III, 1, 8, 1913.
 Swenk, Nebr. Ent. B. 1, 104, 1913.
 Symons, Md. B. 101, 169, 1905.
 Whitmarsh, Ohio B. 253, 145, 1912.
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 129.
- Silver fish**, *see* **Lepisma**
- Silver mite**, *see* **Eriophyes oleivorus**
- Simplemphytus pacificus**
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 121.
- Simuliidae**
 Malloch, Tech. B. 26, U. S. Bur. Ent., 1914.
- Simulium bracteatum**
 Forbes, Ill. Ent. R. 27, 31, 1912.
- Simulium hirtipes**
 Forbes, Ill. Ent. R. 27, 31, 1912.
 Johannsen, Me. B. 187, 4, 1911.
 Sanderson, J. Ec. Ent. III, 27, 1910.
- Simulium johannseni**
 Forbes, Ill. Ent. R. 27, 31, 1912.
- Simulium meridionale**
 Bishopp, U. S. Y. B., 1912, 385.
 Forbes, Ill. Ent. R. 27, 37, 1912.
- Simulium pecuarum**
 Bishopp, U. S. Y. B., 1912, 383.
 Herms, Cal. Cult. XXXIV, 138, 1910.
 Forbes, Ill. Ent. R. 27, 40, 1912.
 Rosenfeld, J. Ec. Ent. III, 217, 1910.
 ——— U. S. Y. B., 1907, 552.
- Simulium pictipes**
 Forbes, Ill. Ent. R. 27, 41, 1912.
 Herrick, Household Ins. 341, 1914.
- Simulium sp.**
 Stokes, J. Cutan. Dis., Nov. 1914, 751.
 O'Kane, N. H. B. 163, 31, 1912.
 Ransom, U. S. B. An. I. R., 1908, 497.
 Washburn, Minn. R. 10, 70, 1905.
 Washburn, Minn. R. 12, 146, 1908.
- Simulium venustoides**
 Forbes, Ill. Ent. R. 27, 42, 1912.
- Simulium venustum**
 Conradi, U. S. B. 52, 100, 1905.
 Forbes, Ill. Ent. R. 27, 44, 1912.
 Herrick, Household Ins. 335, 1914.
 Johannsen, Me. B. 187, 4, 1911.
 Sanderson, J. Ec. Ent. III, 27, 1910.
- Simulium vittatum**
 Hunter, J. Ec. Ent. VI, 97, 1913.
- Simulium and pellagra**
 Crumbine, Kans. Bd. Health B. VII, No. 10, 190, 1911.
 Forbes, Ill. Ent. R. 27, 21, 1912.
 Hunter, Jr. Amer. Med. Assoc. LVIII, 547, 1912.
 Hunter, Trans. Nat'l. Assoc. Study Pellagra, II, 61, 1912.
 Hunter, J. Ec. Ent. VI, 96, 1913.
 Hunter, J. Ec. Ent. VII, 293, 1914.
 Hunter, Kans. Univ. Sci. Bull. VIII, No. 8, 313, 1914.
 Jennings, J. Parasitol., Sept. 1, 1914, 10.
 Jennings & King, Trans. Nat. Assoc. Study Pellagra, II, 51, 1912.
 Jennings & King, J. Amer. Med. Assoc., Jan. 1913, 271.
 Jennings & King, First R. Thompson-McFadden Pellagra Comm. 81, Mar. 1914.
 Roberts, J. Amer. Med. Assoc., June 1911, 1713.
- Simulium, parasite of**
 Webster, Psyche, 1914, 95.
- Sinea diadema**
 Morgan, U. S. B. 63, 51, 1907.
 Webster, Iowa B. 130, 190, 1912.
- Sinoxylon basilare**
 Felt, N. Y. St. Mus. Mem. 8, 442, 1906.
 Gossard, J. Ec. Ent. IV, 206, 1911.
 Gossard, Ohio B. 233, 142, 1911.
 Gossard, Ohio B. 264, 68, 1913.
 Gossard, Ohio C. 140, 12, 1914.
 Newell & Smith, U. S. B. 52, 70, 1905.
 ——— U. S. Y. B., 1906, 515.
- Sinoxylon spp.**
 ——— U. S. Y. B., 1907, 549.
 ——— U. S. Y. B., 1908, 574.
- Sinuate pear-borer**, *see* **Agrilus sinuatus**
- Sipha flava**
 Davis, Tech. B. 12, pt. 8, U. S. Bur. Ent. 156, 1909.

Sipha glyceriae

Patch, Me. B. 182, 241, 1910.

Patch, Me. R. 202, 174, 1913.

Siphocoryne avenae

Bishopp, U. S. Y. B., 1912, 398.

Caesar, Ont. Ent. Soc. R. 28, 1912.

Caesar, Ont. Ent. Soc. R. 43, 78, 1913.

Davis, U. S. D. A. B., 112, 1, 1914.

Dean, Kans. Agr. Educ. I, 4, 43, 1909.

Douglass, Ind. Ent. R. 1, 99, 1908.

Felt, N. Y. R. 25, 76, 1910.

Gillette & Taylor, Colo. B. 133, 30, 1908.

Headlee, Kans. R. 21, XLIX, 1908.

Herrick, N. Y. Dept. Agr. B. 28, 71, '11.

Hodgkiss & Fulton, N. Y. St. C. 23, '13.

O'Kane, Inj. Ins. 198, 317, 1914.

Patch, Me. B. 202, 172, 1913.

Pettit, Mich. B. 258, 315, 1910.

Quaintance, U. S. C. 81, 3, 1907.

Sanderson, Ins. Pests, 604, 1912.

Slingerland & Crosby, Man. Fr. Ins. 151, 1914.

Smith, Nebr. Bd. Agr. R. f. 1908, 315.

Stewart, C. Gentl., May 10, 1913, 743.

Treherne, Pr. Ent. Soc. B. C., 4, 23, '14.

Washburn, Minn. P. B. 32, 20, 1908.

Washburn, Minn. R. 12, 50, 1908.

Washburn, Minn. Ent. Sp. R., 15, 1908.

Wilson, Oreg. Bien. Crop. Pest R. f. 1911-1912, 88.

—— U. S. Y. B., 1905, 635.

Siphonophora avenae, *see* **Siphocoryne****Siphonophora spp** *see* **Macrosiphum****Sitka spruce beetle**, *see* **Dendroctonus obesus****Sitka spruce hylurgops**, *see* **Hylurgops rugipennis****Sitodrepa panicea**

Douglass, Ind. Ent. R. 2, 79, 1910.

Felt, N. Y. St. Mus. B. 129, 40, 1909.

Felt, N. Y. St. Mus. B. 136, 45, 1912.

Herrick, Household Ins. 295, 1914.

Metcalf, N. C. Dept. Agr. Sp. B., 69, '09.

Smith, N. J. B. 203, 36, 1907.

Sitones flavescens

Folsom, Ill. Ent. R. 25, 112, 1909.

Folsom, Ill. B. 134, 184, 1909.

Gossard, Ohio B. 233, 81, 1911.

O'Kane, Inj. Ins. 167, 1914.

Pettit, Mich. B. 258, 280, 1910.

Sitones hispidulus

Gossard, Ohio B. 233, 81, 1911.

Parrott, N. Y. Dept. Agr. B. 62, 1830, 1914.

Pettit, Mich. R. 53, 232, 1914.

Wildermuth, U. S. B. 85, 29, 1910.

—— U. S. Y. B., 1908, 569.

Sitotroga cerealella

Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 52.

Chittenden, South. Plant., Dec. '05, 917.

Chittenden, Amer. Mill., May 1, '09, 364.

Conradi, U. S. B. 60, 69, 1906. ✓

Dean, Kans. Agr. Educ. I, 4, 59, 1909.

Dean, Kans. B. 189, 214, 1913.

Derr, U. S. F. B. 443, 45, 1911.

Dietz, Ind. Ent. R. 6, 84, 1914.

Essig, Cal. Hort. B. II, 1-2, 172, 1913.

Felt, C. Gentl., 1909, 907, 1025.

Gee, S. C. B. 170, 13, 1912.

Gibson, Can. Ent., 1905, 234.

Girault, Ill. B. 156, 69, 1912.

Girault, Ill. Ent. R. 27, 58, 1912.

Gossard, Ohio B. 233, 85, 1911.

Herrick, Household Ins. 239, 1914. /

Hinds, Ala. Poly. B. 176, 52, 1914. \

Newell, Tex. P. B., 1910.

O'Kane, Inj. Ins. 358, 1914.

Peairs, Md. Hort. Soc., 1908, 60, 1909.

Pettit, Mich. B. 258, 298, 1910.

Sanderson, Ins. Pests, 192, 1912.

Slingerland, Rur. N. Y. 1909, 6.

Smith, N. J. Ent. C. 37.

Smith, U. S. B. 67, 102, 1907.

Smith, N. J. R., 1908, 335.

Smith, N. C. B. 197, 39, 1908.

Smith, N. C. B. 203, 14, 1909.

Smith, N. J. Bd. Agr. R. 37, 187, 1910.

Stedman, Mo. Bd. Agr. R. 38, 330, 1906.

Surface, Pa. D. A. Zoöl. III, 1, 7, 1913.

Swenk, Nebr. Ent. B. 1, 104, 1913.

Symons, Md. B. 101, 167, 1905.

Symons, Md. B. 137, 1, 1909.

Tucker, Kans. Farm., Feb. 9, 1905, 148.

Farm & Ranch, Oct. 7, 1905, 7.

Sixeonotus luteiceps

Hunter, Pratt & Mitchell, U. S. B. 113, 36, 1912.

"Sha-Kill"

Surface, Pa. Dept. Agr. R. 13, 303, 1907.

Slender-horned flour-beetle, *see* **Echocerus maxillosus****Slender seed-corn ground-beetle**, *see* **Clivina impressifrons**

Slugs

Smith, N. J. B. 181, 43, 1905.

Small-eyed flour-beetle, see *Palorus ratzburgi***Small gray leaf-weevil, see** *Thricolepsis inornata***Small green rose aphid, see** *Myzus rosarum***Smaller corn stalk-borer, see** *Elasmopalpus lignosellus***Smeared dagger, see** *Acronycta oblonga***Smicraulax tuberculatus**

Pierce, U. S. B. 100, 76, 1912.

Smicronyx tychoides

Pierce, U. S. B. 100, 75, 1912.

Smilia misella, see *Microweisia***Smynthurus albamaculata**

Patch, Me. B. 123, 220, 1905.

Patch, Me. B. 134, 225, 1906.

Patch, Me. B. 187, 24, 1911.

Smynthurus arvalis

Felt, N. Y. R. 27, 103, 1912.

Smynthurus sp.

Fink, J. Ec. Ent. VII, 400, 1914.

Snowy tree-cricket, see *Æcanthus niveus***Soap solution**

Sherman, N. C. Dept. Agr. B. June, 1909, 19.

Smith, N. J. R., 1907, 456.

Smith, N. J. B. 213, 23, 1908.

Soap washes

Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 21, 1907.

Social grape caterpillar, see *Harrisina americana***Soda wash**

Doten, Nev. B. 66, 26, 1908.

Sodium cyanide

Essig, Pom. Jr. Ent. III, 385, 1911.

Woglum, J. Ec. Ent. III, 85, 1910.

Woglum, U. S. B. 90, 83, 1912.

Soft brown scale, see *Coccus hesperidum***Soft scale, see** *Coccus hesperidum***Soil Fumigant and Insecticide**

Fernald, Mass. R. 25, I, 90, 1913.

Soil fumigation

Hyslop, J. Ec. Ent. VII, 305, 1914.

Solenopsis debilis

Brooks, W. Va. R. f. 1909-1910, 190.

Swenk, Nebr. Bd. Agr. R. f. 1909, 246.

Vickery, U. S. B. 85, 106, 1910.

Solenopsis geminata

Hinds, U. S. B. 74, 24, 1907.

Hinds, Ala. Poly. R. 20, 37, 1908.

Hooker, Bishopp & Wood, U. S. B. 106, 42, 1912.

Howard, U. S. R. Ent., 1905, 5.

Howard, U. S. R. Ent., 1907, 10.

Howard, U. S. R. Ent., 1908, 7.

Hunter, U. S. Y. B., 1906, 318.

Hunter & Hinds, U. S. B. 51, 149, 1905.

Hunter & Hooker, U. S. B. 72, 36, 1907.

Hunter & Pierce, U. S. B. 114, 139, 1912.

Newell, La. Crop Pest Comm. C. 13, 8, 1907.

Newell, J. Ec. Ent. I, 33, 1908.

Pierce, U. S. B. 100, 70, 1912.

Vickery, U. S. B. 85, 116, 1910.

Solenopsis geminata var. xyloni

Hinds, U. S. B. 63, 45, 1907.

Solenopsis molesta

Hunter & Pierce, U. S. B. 114, 140, 1912.

Pierce, U. S. B. 100, 70, 1912.

Vickery, U. S. B. 85, 116, 1910.

Solenopsis tenuis

Buck, Va. R. f. 1908, 67.

Solenopsis texana

Hunter & Pierce, U. S. B. 114, 140, 1912.

Pierce, U. S. B. 100, 70, 1912.

Quaintance & Brues, U. S. B. 50, 108, 1905.

Solenopsis validiusculus

Jenne, U. S. B. 80, 30, 1909.

Soluble oil

Britton & Walden, Conn. R. f. 1907-1908, 837.

Gossard, Ohio C. 60, 1906.

Jarvis, Can. Hort. XXXIV, 28, 1911.

Morrill, Nat'l Fr. Grow., Nov. 1906, 7.

Parrott, N. Y. Fr. Grow. Assoc., 1906, 25, 134.

Phillips, South. Plant., Dec., 1908, 1066.

Sherman, N. C. Dept. Agr. B. June 1912, 21.

Smith, N. J. R., 1905, 608, 614.

Smith, N. J. R., 1910, 369.

Surface, Pa. Dept. Agr. R. 13, 520, 1907.

Surface, Pa. Hort. Assoc. R. f. '08, 85.

Taft & Shaw, Mich. Sp. B. 45, 396.

Worsham, Pr. Ga. Hort. Soc., 1908, 73.

Soluble sulphur

Mitchell, Can. Hort. XXXVII, 91, 92, 1914.

Smith, N. J. R., 1909, 366.

——— Can. Hort. XXXVII, 121, 1914.

- Sorghum* midge, *see* *Contarinia sorghicola*
- Southern buffalo gnat, *see* *Simulium pecuarum*
- Southern cabbage butterfly, *see* *Pontia protodice*
- Southern cabbage worm, *see* *Pontia protodice*
- Southern corn root-worm, *see* *Diabrotica duodecempunctata*
- Southern hornworm, *see* *Phlegethontius sexta*
- Southern leaf-footed plant-bug, *see* *Lep-toglossus phyllopus*
- Southern pine beetle, *see* *Dendroctonus frontalis*
- Southern pine sawyer, *see* *Monohammus titillator*
- Southern tobacco worm, *see* *Phlegethontius sexta*
- Southwestern pine beetle, *see* *Dendroctonus barberi*
- Spalangia hirta*
Marlatt, U. S. C. 115, 7, 1910.
- Spalangia lanaiensis*
Marlatt, U. S. C. 115, 7, 1910.
- Spalangia muscae*
Bishopp, J. Ec. Ent. VI, 124, 1913.
- Spalangia muscidarum*
Bishopp, U. S. F. B. 540, 23, 1913.
Pinkus, Psyche, 1913, 148.
Richardson, Psyche, 1913, 38.
- Spalgis substrigata*
Smith, Cal. Hort. III, 1, 27, 1914.
- Sparganothis flavibasana*
Gibson, Ont. Ent. Soc. R. 36, 121, 1906.
Gibson, Ont. Ent. Soc. R. 39, 117, 1909.
Gibson, Ont. Ent. Soc. R. 40, 14, 1910.
- Sparnopolius fulvus*
Forbes, Ill. B. 116, 473, 1907.
Forbes, Ill. Ent. R. 24, 161, 1908.
- Spermophagus robiniae*
Pierce, U. S. B. 100, 74, 1912.
- Speckled cutworm, *see* *Mamestra sub-juncta*
- Sphaerophoria cylindrica*
Chittenden, Va. Truck Exp. Sta. B. 2, 24, 1909.
Herrick, J. Ec. Ent. IV, 222, 1911.
Herrick & Hungate, N. Y. C. B. 300, 736, 1911.
Webster & Phillips, U. S. B. 110, 131, 1912.
- Sphaerophoria melanosa*
Davidson, U. S. D. A. B. 100, 37, 1914.
- Sphaerophoria sulphuripes*
Davidson, U. S. D. A. B. 100, 37, 1914.
Russell, U. S. B. 118, 41, 1912.
- Sphaeropyx bicolor*
Cushman, Pr. Ent. Soc. Wash. XV, 157, 1913.
- Sphaerostilbe coccophila*
Lewis, Pr. Ga. Hort. Soc., 1908, 81.
Rolf, Ind. Farm., Apr. 23, 1910, 16.
Smith, Pr. Ga. Hort. Soc., 1907, 150.
Smith, N. J. R., 1908, 334.
Smith, J. Ec. Ent. I, 157, 1908.
Stewart, N. Y. St. B. 328, 321, 1910.
- Sphecius nevadensis*
Quaintance, U. S. Y. B., 1907, 443.
- Sphecius speciosus*
Felt, N. Y. St. Mus. Mem. 8, 603, 1906.
Marlatt, U. S. B. 71, 132, 1907.
Smith, N. J. R., 1908, 332.
- Sphecodina abbotii*
O'Kane, Inj. Ins. 273, 1914.
Sanderson, Ins. Pests, 520, 1912.
- Sphenophorus aequalis*
Webster, U. S. Y. B., 1908, 384.
- Sphenophorus callosus*
Morrill, Ariz. Comm. Agr. & Hort. R. 6, 33, 1914.
Sherman, N. C. Dept. Agr. B., 26, 5, 19, 1905.
Smith, N. C. R. 35, 106, 1912.
Webster, U. S. B. 95, 53, 1912.
- Sphenophorus cariosus*
——— U. S. Y. B., 1908, 570.
- Sphenophorus discolor*
Smith, Cal. Hort. B. II, 8, 619, 1913.
- Sphenophorus maidis*
Chittenden, Ins. Inj. Veg. 196, 1907.
Kelly, U. S. B. 95, 11, 1911.
O'Kane, Inj. Ins. 128, 1914.
Sanderson, Ins. Pests, 178, 1912.
- Sphenophorus obscurus*
Maskew, Cal. Hort. B. II, 9, 653, 1913.
Sanderson, Ins. Pests, 175, 1912.
- Sphenophorus ochreus*
Stedman, Mo. Bd. Agr. R. 38, 286, 1906.
Washburn, Minn. R. 14, 74, 1912.
- Sphenophorus parvulus*
Hunter, Pr. Ent. Soc. Wash. XIV, 62, 1912.
Sanderson, Ins. Pests, 175, 1912.

- Smith, N. C. R. 35, 136, 1912.
 Stedman, Mo. Bd. Agr. R. 38, 286, 1906.
 Swenk, Nebr. Bd. Agr. R. f. 1910, 366.
 Swenk, Nebr. Ent. B. 1, 81, 1913.
 Tucker, Kans. Farm., Oct. 26, '05, 1088.
 Washburn, Minn. R. 14, 71, 1912.
 Webster, J. Ec. Ent. III, 503, 1910.
 ——— U. S. Y. B., 1906, 510.
- Sphenophorus pertinax**
 Stedman, Mo. Bd. Agr. R. 38, 286, 1906.
- Sphenophorus sculptilis**
 Pettit, Mich. B. 233, 205, 1906.
 Pettit, Mich. B. 258, 293, 1910.
- Sphenophorus sp.**
 Dean, Kans. Agr. Educ. I, 4, 18, 1909.
 Forbes, Ill. Ent. R. 24, 1, 1908.
 Price, Va. C. 7, 69, 1909.
 Sanborn, Okla. B. 100, 30, 1912.
 Watson, Fla. R., 1912, LXIII.
 Weldon, Md. Hort. Soc., 1907, 66, 1908.
- Sphenophorus spp.**
 Forbes, Ill. Ent. R. 23, 52, 1905.
 Haseman, Mo. Bd. Agr. R. 44, 273, '12.
- Sphenophorus venatus**
 Webster, U. S. Y. B., 1908, 383.
 ——— U. S. Y. B., 1906, 510.
- Sphenophorus zeae**
 Chittenden, Ins. Inj. Veg. 197, 1907.
- Sphinx atropos**
 Howard, U. S. B. 54, 81, 1905.
- Sphinx drupiferarum**
 Brittain, Pr. Ent. Soc. B. C., 4, 15, 1914.
 O'Kane, Inj. Ins. 274, 1914.
- Sphinx eremitus**
 Gibson, Ont. Ent. Soc. R. 36, 119, 1906.
- Sphinx gordius**
 Franklin, Can. Ent., 1907, 19.
- Sphinx kalmiae**
 Felt, N. Y. St. Mus. Mem. 8, 548, 1906.
- Sphragisticus nebulosus**
 Forbes, Ill. Ent. R. 23, 198, 1905.
- Spider on lawns**
 Tucker, Kans. Farm., Aug. 9, 1906, 831.
- Spiders, bite of**
 Herrick, Rur. N. Y., 1912, 994.
 Herrick, Household Ins. 399, 1914.
- Spiders vs. borers**
 Herrick, Rur. N. Y., 1911, 684.
- Spiders in house**
 Felt, C. Gentl., 1906, 1003.
- Spilochalcis odontotae**
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 18, 1906.
- Spilochalcis vittata**
 Gossard, Fla. B. 79, 288, 1905.
- Spilochalcis mariae**
 Howard & Chittenden, U. S. C. 97, 7, 1908.
- Spilochalcis sp. on boll weevil**
 Hunter & Pierce, U. S. B. 114, 141, 1912.
 Pierce, U. S. B. 100, 49, 1912.
- Spilochalcis torvina**
 Titus, U. S. B. 54, 40, 1905.
- Spilonota ocellana**, *see* **Tmetocera**
- Spilosoma virginica**, *see* **Diacrisia**
- Spinach aphid**, *see* **Myzus persicae**
- Spinach flea-beetle**, *see* **Disonychia xanthomelaena**
- Spinach leaf-miner**, *see* **Pegomyia vicina**
- Spiny oak worm**, *see* **Anisota stigma**
- Spittle insects**
 Britton, Conn. R. 13, 255, 1914.
- Spotless fall webworm**, *see* **Hyphantria textor**
- Spotted blister beetle**, *see* **Epicauta maculata**
- Spotted cutworm**, *see* **Noctuac-nigrum**
- Spotted fever**
 Cooley, Mont. B. 85, 6, 1911.
 Cooley, Mont. B. 88, 92, 1912.
 Fricks, Mont. Bd. Bien. R. 1, 28, 1914.
 Hunter & Bishopp, U. S. B. 105, 1911.
- Spotted fever tick**, *see* **Dermacentor venustus**
- Spotted ladybird**, *see* **Megilla maculata**
- Spotted milkweed bug**, *see* **Oncopeltus fasciatus**
- Spotted pelidnota**, *see* **Pelidnota punctata**
- Spotted root fly**, *see* **Euxesta notata**
- Spotted strawberry leaf-beetle**, *see* **Typhoporus canellus**
- Spotted willow leaf-beetle**, *see* **Melasoma lapponica**
- Spray calendar**
 Caesar, Ont. Agr. Coll. B. 198, 40, 1912.
 Chandler, Mo. Hort. Soc., 1909, 379.
 Dean, Lewis & Merrill, Kans. Farm., Jan. 31, 1914, 7.
 Faurot, Mo. Hort. Soc., 1912, 99.
 Faurot, Mo. Bd. Agr. R. 45, 560, 1913.
 Gossard, Ohio Bd. Agr. R. 60, 405, 1905.
 Green, Nat'l Grow., Dec. 1905, 4.

Spray calendar (*Cont'd*)

- Green, Nat'l Fr. Grow., Dec., 1906, 4.
 Green, Selby & Gossard, Ohio B. 199, 1908.
 Green, Selby & Gossard, Ohio B. 232, 1911.
 Hall & Yothers, Wash. Pop. B. 59, 1914.
 Hewitt, Can. Exp. Farms. Ent. B. 6, 21, 1912.
 Hitchings, Me. Dept. Agr. B., vol. IX, 1, 2, 36, 1910.
 Hodgkiss, N. Y. Fr. Grow. Assoc., 1913, 285.
 Kohler, Minn. Hort. Soc., 1909, 133.
 Lovett, Okla. B. 92, 1911.
 Melander, Better Fr., Feb., 1909, 23.
 Melander & Beattie, Wash. Pop. B. 13, 1909.
 Melander & Beattie, Wash. Pop. B. 27, 1910.
 Melander & Beattie, Wash. Pop. B. 52, 1913.
 Sanborn, Tex. B. 113, 5, 1908.
 Shaw, Ohio Nurs. Orch. Insp. B. 11, '10.
 Smith, Ga. Bd. Ent. B. 19, 157, 1906.
 Straight, Can. Hort. XXXVI, 37, 1913.
 Stuart, Vt. B. 113, 96, 1905.
 Surface, Pa. D. A. Zool. B. III, 1, 8, '05.
 Taft & Shaw, Mich. Hort. Soc., 1908, 138, 1909.
 Taft & Shaw, Mich. Sp. B. 45, 391, '08.
 Vosler, Cal. Fr. Grow., May 23, '14, 4.
 Whiteside, Mont. Bd. Hort. f. 1907-1908, 55, 1909.
 ——— Better Fr., Apr. 1909, 41.
 ——— Better Fr., Feb. 1911, 47.
 ——— Cal. Cult., XXX, 296, 1908.
 ——— C. Gentl., Apr. 4, 1914, 702.
 ——— Iowa Hort. Soc. f. 1904, 176, '05.
 ——— Nat'l Fr. Grow., Mar. 1910, 4.
 ——— Oreg. Hort. 8th Bien. R., 49.
 ——— Va. Agr. R. f. 1907, 127, 1908.
 ——— Va. Agr. R. f. 1910, 94, 1910.
 ——— Va. Agr. R. f. 1912, 82, 1912.
- Spray formulas**
 Ashby, Proc. Ark. Hort. Soc., 1910, 119.
 Bentley, Tenn. Bd. Ent. R. 7, 10, 1912.
 Bentley, Tenn. B. 99, 63, 1913.
 Bentley, Tenn. Bd. Ent. B. 10, 3, 1913.
 Caesar, Can. Hort. XXXVII, 89, 1914.
 Cordley, Better Fr., Mar. 1911, 40.
 Eustace & Pettit, Mich. Sp. B. 69, 447, 1914.
 Faurot, Mo. Bd. Agr. R. 45, 560, 1913.
 Gardner, Me. Comm. Agr. R., 1911, 53, 1912.
 Greene, Kans. Farm., Feb. 15, '13, 28.
 Henry, Can. Hort. XXXVII, 26, 1914.
 Melander, Wash. Hort. Assoc. 6th R., 87, 1910.
 Munson, W. Va. B. 121, 363, 1909.
 Newman, S. C. B. 166, 37, 1912.
 O'Kane, C. Gentl., Apr. 4, 1914, 683.
 Parrott, N. Y. Fr. Grow. Assoc., '10, 25.
 Selby, Ohio C. 87, 6, 1908.
 Sherman, N. C. Dept. Agr. B., June 1909, 21.
 Slingerland & Crosby, Man. Fr. Ins. 9, 1914.
 Snyder, Minn. Hort. Soc., 1907, 168.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 477, 1911.
 Wilson, Oreg. Circ. B. 12, 7, 1909.
 Wilson, Pr. Ent. Soc. B. C., 3, 9, 1913.
 ——— Mich. Sp. B. 57, 516, 1912.
- Spray injury**
 Ball, Kans. Hort. Soc., 1909, 334.
 Crandall, Ill. Hort. Soc. f. 1907, 531.
 Reed, Va. Hort. Soc. 16th R., 277, 1912.
 Surface, Pa. Dept. Agr. R. 17, 393, 1911.
- Spray nozzle, new type**
 Stone, Mass. R. 23, II, 69, 1911.
- Spray, one application**
 Quaintance & Scott, U. S. B. 115, 87, 1912.
- Spray resistance**
 Melander, J. Ec. Ent. VII, 167, 1914.
- Sprayer, compressed air**
 Burton, Farm. Guide, Aug. 29, 1914, 6.
 Verclar, Northw. Hort., Apr. 1908, 78.
- Spraying**
 Aldrich, Ill. Hort. Soc. f. 1911, 130, '12.
 Andrews, Minn. Hort. Soc., 1911, 107.
 Back, Fla. Hort. Soc. Trans. f. '10, 85.
 Ball, Deseret Farm., June 8, 1907, 8.
 Ball, Deseret Farm., Apr. 30, 1910, 14.
 Ball, Deseret Farm., Apr. 1, 1911, 1.
 Bassett, Pa. Hort. Assoc., 53rd Meet., 1912, 48.
 Beach, Iowa Hort. Soc. f. 1905, 391, '06.
 Beach, Iowa Hort. Soc. f. 1906, 149, 338, 1907.
 Beach, Iowa Hort. Soc. f. 1911, 270, '12.

Spraying (*Cont'd*)

- Beebe, Minn. Hort. Soc., 1911, 143.
 Beebe, Minn. Hort. Soc., 1912, 228.
 Bessey, Nebr. Hort. Soc., 1906, 207.
 Bingham, Minn. Hort. Soc., 1913, 198.
 Blair, Kans. Hort. Soc., 1909, 331.
 Bliss, Iowa Hort. Soc. f. 1910, 44, 338, 1911.
 Bonns, Me. Pom. Soc., 1909-1910, 47.
 Brayton, Ill. Hort. Soc. f. 1913, 331.
 Brown, N. J. Hort. Soc., 1905, 69.
 Brown, Am. Agric., Feb. 24, 1906, 250.
 Brown, Wis. Farm., Apr. 12, 1906, 9.
 Bryant, Farm. Guide, Feb. 1, 1913, 4.
 Budlong, Ohio Hort. Soc., 1911, 7.
 Burgess, Ohio Bd. Agr. R. 60, 610, 1905.
 Burlingame, Nat'l Stockm. & Farm., Mar. 6, 1913, 16.
 Burton, Farm. Guide, Mar. 12, 1910, 8.
 Burton, Farm. Guide, Jan. 24, 1914, 3.
 Caesar, Can. Hort. XXXVI, 27, 1913.
 Chandler, Mo. Hort. Soc., 1908, 314.
 Chandler, Mo. Hort. Soc., 1909, 352.
 Clemmer, Rur. N. Y., 1912, 261.
 Coe, S. D. Hort. Soc. 11th R., 6, 1914.
 Coffin, Farm. Guide, Apr. 9, 1910, 26.
 Colchester, Farm. Guide, Mar. 19, '10, 6.
 Cooper, Nebr. Hort. Soc., 1913, 202.
 Corbett, Nat'l. Stockm. & Farm., Feb. 8, 1906, 12.
 Cordley, Oreg. Bd. Hort. 11th Bien. R., 63, 1911.
 Cordley, Better Fr., Jan. 1914, 11.
 Crandall, Ill. Hort. Soc. f. 1905, 251.
 Craneheld, Wis. Hort. Soc. R. f. 1906, 298.
 Dean, Kans. Hort. Soc., 1912, 83.
 Denny, Nebr. Hort. Soc., 1908, 79.
 Dickens, Kans. Farm., Mar. 19, 1910, 2.
 Dickens & Eastman, Kans. R. 20, 195, 1907.
 Duncan, Can. Hort. XXXVI, 59, 1913.
 Duncan, Can. Hort. XXXVII, 27, 1914.
 Duncan, Farm & Dairy, Can., Mar. 5, 1914, 3.
 Dunlap, Mich. Hort. Soc., 1905-1906, 14, 1907.
 Dunlap, Ill. Hort. Soc. f. 1906, 291.
 Dunlap, Ill. Hort. Soc. f. 1910, 332, 1911.
 Dunlap, Prai. Farm., Apr. 15, 1913, 9.
 Dutcher, Ark. Hort. Soc. Ann. Sess. 25, 33, 1905.
 Emerson, Nebr. Hort. Soc., 1907, 262.
 Falvay, Can. Hort. XXXIII, 26, 1910.
 Farnsworth, O. Farm., Mar. 2, '12, p. 188.
 Farrand, Mich. Hort. Soc., 1907, 105, 1908.
 Faurot, Mo. Hort. Soc., 1912, 80.
 Felt, N. Y. Dept. Agr. B. 37, 1413, 1912.
 Fernald, J. Ec. Ent. I, 265, 1908.
 Foglesong, Ill. Hort. Soc. f. 1910, 432, 1911.
 Foster, Better Fr., Feb. 1914, 17.
 Foster, Mont. Hort. Soc., 1914, 21.
 Frick, Farm. Guide, Apr. 10, 1909, 4.
 Funk, Pa. Dept. Agr. B. 137, 54, 1905.
 Funk, Pa. Dept. Agr. R. 11, 185, 1905.
 Gibson, Mo. Hort. Soc., 1905, 313.
 Gillette, Colo. Bd. Hort. R. f. 1908, 29, 1909.
 Gossard, Green's Fr. Grow., Feb., '10, 5.
 Gossard, Ohio Hort. Soc., 1912, 57.
 Green, Ind. Bd. Agr. R. 55, 543, 1907.
 Haldeman, Mo. Hort. Soc., 1908, 53.
 Hale, Wis. Hort. Soc. R. f. 1905, 203.
 Halligan, Mich. Hort. Soc., 1912, 26, '13.
 Hamilton, Farm. Advocate, Can., 1908, 119.
 Hamilton, Can. Hort. XXXV, 30, 1912.
 Harrington, Iowa Hort. Soc. f. 1905, 123, 1906.
 Harrington, Iowa Hort. Soc. f. 1907, 73, 1908.
 Hartman, Mich. Farm., May 13, 1911, V, 136, p. 544.
 Hartman & Eustace, Mich. R. 48, 223, 1909.
 Hedrick, Prai. Farm., Mar. 30, '05, 4.
 Heine, Pa. Dept. Agr. R. 13, 518, 1907.
 Henderson, Better Fr., May 1908, 13.
 Henthorne, Ark. Hort. Soc. Ann. Sess. 25, 57, 1905.
 Herrick, Iowa. Hort. Soc. f. 1914, 437, 1915.
 Hewitt, Pr. Ark. Hort. Soc., 1912, to 1913, 21.
 Hilton, Prai. Farm., LXXVIII, 52, 1906.
 Hodgetts, Can. Hort. XXVIII, 209, '05.
 Howard, Nebr. Hort. Soc., 1911, 151.
 Howard, Nebr. Hort. Soc., 1912, 205.
 Howard, Mo. P. B. 33, 1914.
 Howe, Ill. Hort. Soc. f. 1909, 437.
 Hurst, Better Fr., May, 1908, 7.

Spraying (*Cont'd*)

- Hurst, Better Fr., Feb., 1910, 24.
 Hutchins, Mich. Farm., Jan. 18, 1908, V, 53, p. 66.
 Hutt, N. C. Dept. Agr. B. Aug., '08, 28.
 Johannsen, Me. B. 207, 465, 1912.
 Johnson, Ind. Hort. Soc. f. 1910, 24, '11.
 Kinmundy, Ill. Hort. Soc. f. 1904, 488, 1905.
 Leopold, Can. Hort. XXXVII, 29, 1914.
 Lewis, Better Fr., Feb. 1913, 56.
 Lochhead, Can. Hort. XXVIII, 179, '05.
 Lochhead, Can. Hort. XXVIII, 213, '05.
 Lochhead, Nat'l Fr. Grow., Dec. '06, 11.
 Lutman, Vt. Hort. Soc. R. 9, 113, 1912.
 Lutman, Vt. Hort. Soc. 10th R., 113, '13.
 Marshall, Nebr. Hort. Soc., 1910, 245.
 Marshall, Nebr. Hort. Soc., 1912, 169.
 Maxwell, Kans. Hort. Soc., 1910, 78.
 McLean, N. J. Hort. Soc., 1912, 137.
 Melander, Better Fr., Oct. 1911, 30.
 Melander, Wash. Hort. Assoc. 7th R., 152, 1911.
 Menges, Pa. Dept. Agr. R. 15, 513, 1909.
 Merrill, Nebr. Hort. Soc., 1909, 61.
 Merrill, Kans. Hort. Soc., 1912, 88.
 Messenger, Can. Hort. XXXV, 137, '12.
 Mills, Cal. Cult., XXVII, 436, 1906.
 Milward, Wis. C. Inform. 12, 1910.
 Milward, Wis. Hort. Soc. R. f. 1910, 36, 154.
 Morgan, Tenn. Dept. Agr. Bien. R., 1907-1908, 27.
 Morrill, S. W. Stockm., Jan. 9, 1914, 10.
 Morris, Okla. B. 76, 5, 1908.
 Munson, Me. B. 128, 65, 1906.
 Newlin, Kans. Hort. Soc., 1906, 73.
 Nordine, Minn. Hort. Soc., 1908, 132.
 O'Kane, N. H. Hort. Soc., 1913, 33.
 Pabody, Minn. Hort. Soc., 1908, 126.
 Parker, Can. Hort. XXXV, 25, 1912.
 Parrott, N. Y. Fr. Grow. Assoc., '07, 90.
 Parrott, Green's Fr. Grow., Feb. 1913, 1.
 Parrott, Green's Fr. Grow., Feb. 1914, 2.
 Parrott, N. Y. Fr. Grow. Assoc., '14, 36.
 Pease, Cal. Cult., XXXVI, 235, 1911.
 Perrine, Ill. Hort. Soc. f. 1905, 526.
 Perrine, Ill. Hort. Soc. f. 1907, 161.
 Perrine, Ill. Hort. Soc. f. 1909, 81, 195, 474.
 Pettit, Mich. Hort. Soc., 1912, 48, 1913.
 Powell, Am. Agric., Mar. 10, 1906, 320.
 Reddick, N. Y. Fr. Grow. Assoc., '13, 51.
 Reed, Ind. Hort. Soc. f. 1911, 110, 1912.
 Reel, Minn. Hort. Soc., 1911, 436.
 Richardson, Kans. Hort. Soc., '10, 81.
 Rogers, Pa. Dept. Agr. B. 190, 50, 1910.
 Ross, Farm. World, Can., Mar. 4, '08, 3.
 Roudebush, Nat'l Stockm. & Farm., Mar. 16, 1905, 10.
 Rowell, Minn. Hort. Soc., 1905, 219.
 Ruggles, Minn. Hort. Soc., 1911, 98.
 Ruggles, Minn. Hort. Soc., 1912, 170.
 Sanders, Wis. Hort. Soc. R. f. 1914, 17.
 Sanderson, N. H. Bd. Agr. R., 1905-1907, 81, 152.
 Sanderson, N. H. Bd. Agr. R., 1907-1908, 65.
 Sanderson, N. H. Hort. Soc., 1909, 86.
 Schermerhorn, Wis. Hort. Soc. R. f. 1905, 214.
 Scott, Mich. Hort. Soc., 1910, 162, 1911.
 Scott, Va. Agr. R. f. 1913, 113, 1913.
 Sherman, N. C. Dept. Agr. B. May 1908, 9.
 Sherman, N. C. Dept. Agr. B. June 1909, 5.
 Sherman, N. C. Dept. Agr. B. June, 1912, 23.
 Sherman, Prog. Farm., Mar. 1, '13, 310.
 Sill, Pa. Dept. Agr. B. 217, 45, 1912.
 Simpson, Ill. Hort. Soc. f. 1905, 499.
 Slingerland, Kans. Farm., Mar. 28, 1907, 413.
 Smith, N. J. Hort. Soc., 1905, 55.
 Smith, Pr. Columbus Hort. Soc., 1907, 116.
 Smith, N. J. Hort. Soc., 1909, 157.
 Smith, Farm & Dairy, Can., Mar. 3, 1910, 4.
 Smith, Kans. Hort. Soc., 1911, 326.
 Smith, N. J. Hort. Soc., 1906, 70.
 Snively, Pa. Dept. Agr. R. 12, 525, '06.
 Spates, Minn. Hort. Soc., 1908, 128.
 Stakman, Minn. Hort. Soc., 1913, 214.
 Starr, Can. Hort. XXX, 81, 1907.
 Stene, Pr. R. I. Farmers' Inst., 1911, 102.
 Stephens, Nat'l Fr. Grow., Mar. '06, 24.
 Stephens, Green's Fr. Grow., May, 1906, 17.
 Stephens, Nebr. Farm., July 12, '06, 596.
 Stephens, Nebr. Farm., May 6, 1908, p. 469.
 Surface, Pa. Dept. Agr. R. 14, 520, 1908.

Spraying (*Cont'd*)

- Surface, Pa. D. A. Zoöl. V, 11, 332, 1907.
 Surface, Pa. D. A. Zoöl. VI, 1, 4, 1908.
 Surface, Pa. D. A. Zoöl. VII, 4, 108, '09.
 Surface, Pa. D. A. Zoöl. VII, 10, 295, 1910.
 Sutton, Colo. Bd. Hort. R. f. 1909, 32, 1910.
 Sutton, Colo. Fr. Grow., June 1910, 39.
 Symons, Pa. Dept. Agr. R. 15, 619, '09.
 Taft, Mich. Hort. Soc., 1905-1906, 144, 1907.
 Taft, Nat'l Fr. Grow., Mar. 1906, 8.
 Taft, Green's Fr. Grow., Apr. '06, 16.
 Taft, Mich. Sp. B. 37, 1907.
 Taft, Mo. Hort. Soc., 1907, 166.
 Taft, Nat'l Fr. Grow., Mar. 1907, 24.
 Taft, Mich. R. 47, 153, 1908.
 Taft, Wis. Hort. Soc. R. f. 1908, 90.
 Taft, Green's Fr. Grow., Feb. 1909, 4.
 Taft, Mich. Hort. Soc., 1908, 23, 1909.
 Taft, Nat'l Fr. Grow., May 1910, 5.
 Taft, Mich. Farm., Feb. 11, 1911, V, 136, p. 155.
 Thompson & Caesar, Can. Hort. XXXIV, 55, 1911.
 Troop, Farm. Guide, Feb. 23, 1907, 1.
 True, Minn. Hort. Soc., 1907, 162.
 Tuck, Wis. Hort. Soc. R. f. 1910, 137.
 Turney, Can. Hort. XXXVI, 25, 1913.
 Twedde, Can. Hort. XXIX, 56, 1906.
 Underwood, Farm. Guide, Jan. 24, '14, 4.
 Van Alstyne, Va. Hort. Soc. 15th R., 213, 1911.
 Van Deman, Green's Fr. Grow., Feb., 1912, 6.
 Volck, Pac. Rur. Press, LXXIV, 396, 1907.
 Volck, Pac. Rur. Press, LXXV, 234, '08.
 Volck, Cal. Cult., XLII, 458, 1914.
 Wallisch, Mont. Hort. Soc., 1909, 26.
 Warren, N. J. B. 194, 1906.
 Washburn, Minn. Hort. Soc., 1906, 69.
 Washburn, Minn. Hort. Soc., 1908, 136, 230.
 Washburn, Minn. Hort. Soc., 1909, 136.
 Watkins, Ill. Hort. Soc. f. 1910, 145, 1911.
 Watkins, Ill. Hort. Soc. f. 1911, 96, 372, 1912.
 Watkins, Ill. Hort. Soc. f. 1912, 76, 395, 1913.
 Watkins, Ill. Hort. Soc. f. 1913, 205, 499.
 Weldon, Cal. Cult., XL, 102, 1913.
 White, Mich. Hort. Soc., 1909, 147, '10.
 White, Iowa Agric., Mar. 1911, 25.
 Whiteford, Green's Fr. Grow., May 1912, 21.
 Wilken, Mich. Sp. B. 46, 408, 1908.
 Wilken, Mich. Hort. Soc., 1910, 9, 1911.
 Wilson, Farm & Fireside, June 10, '07, 1.
 Wilson, Better Fr., Apr. 1913, 44.
 Wood, Mont. Hort. Soc., 1914, 14.
 Woodson, Mo. Hort. Soc., 1910, 110.
 Woodworth, Better Fr., Apr. 1911, 65.
 ——— Rur. N. Y., 1905, 53, 333.
 ——— Ont. Dept. Agr. Fr. B. 194, 30, 1911.
 ——— Wyo. Bd. Hort. 1st Bien. R., 45, 1905-1906.
 ——— Wyo. Bd. Hort. 4th Bien. R., 42, 1911-1912.

Spraying apparatus

- Brown, Wis. Farm., Mar. 16, 1905, 8.
 Caesar, Ont. Agr. Coll. B. 187, 30, 1911.
 Chittenden, Ins. Inj. Veg. 43, 1907.
 Craneheld, Wis. Hort. Soc. R. f. 1906, 309.
 Fernald, Mass. Bd. Agr. C. 2, 3, 1913.
 Faurot, Mo. Fr. Exp. Sta. B. 20, 3, 1908.
 Faurot, Mo. Fr. Exp. Sta. B. 22, 3, 1912.
 Faurot, Mo. Hort. Soc., 1912, 200.
 Goodwin, Ohio Hort. Soc., 1910, 49.
 Goodwin, Ohio B. 248, 775, 1912.
 Hartman, Kans. Hort. Soc., 1911, 335.
 Jenne, Wash. B. 69, 13, 1905.
 Hutchins, Mich. Farm., Apr. 16, 1910, V, 134, p. 446.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 438.
 Melander, Better Fr., Apr. 1909, 36.
 Melander & Beattie, Wash. B. 106, 4, 1913.
 Moore, Wis. B. 190, 33, 1910.
 Morrill, S. W. Stockm., Mar. 13, 1914, 9.
 O'Kane, Inj. Ins. 92, 1914.
 Pettit, Mich. Sp. B. 37, 288, 1907.
 Price, Va. C. 7, 78, 1909.
 Rees, Mass. Hort. Soc. f. 1914, I, 89.
 Robinson, Can. Hort. XXXVII, 61, '14.
 Rogers, Pa. Dept. Agr. B. 190, 48, 1910.
 Rumsey, Giddings & Dacy, W. Va. B. 133, 6, 1911.

Spraying apparatus (*Cont'd*)

- Sanderson, Ins. Pests, 60, 1912.
 Sherman, Prog. Farm., Mar. 21, '05, 2.
 Sherman, N. C. Dept. Agr. B., June 1909, 19.
 Smith, N. J. B. 181, 47, 1905.
 Smith, Ga. Bd. Ent. B. 19, 135, 1906.
 Smith, Ga. Bd. Ent. B. 21, 224, 1906.
 Surface, Pa. D. A. Zoöl. II, 2, 68, 1912.
 Wadsworth, Mich. Hort. Soc., 1905-1906, 146, 1907.
 Waid, Ohio. Hort. Soc., 1909, 90.
 Waite, Cal. Cult., XXVII, 291, 1906.
 Weldon, Nebr. Hort. Soc., 1912, 233.
 Weldon, Better Fr., Nov., 1912, 36.
 Woods, N. J. Bd. Agr. R. 36, 98, 1909.
 Worsham, Ga. Bd. Ent. B. 35, 96, 1911.
 Worsham, Pr. Ga. Hort. Soc., 1911, 96.
 ——— Better Fr., Jan. 1909, 36.

Spraying Cooperative

- Bryant, Ill. Hort. Soc. f. 1907, 316.
 M'Neill, Can. Hort. XXVIII, 93, 1905.

Spring canker-worm, see *Paleacrita vernata***Spring grain aphid, see *Toxoptera graminum*****Spruce bark-beetle see *Polygraphus rufipennis*****Spruce bud worm, see *Tortrix fumiferana*****Spruce cone-worm, see *Dioryctria reniculella*****Spruce-destroying beetle, see *Dendroctonus piceaperda*****Square-necked grain-beetle, see *Cathartus gemellatus*****Squash ladybird, see *Epilachna borealis*****Squash-bug, see *Anasa tristis*****Squash-vine borer, see *Melittia satyriniformis*****Stable fly, see *Stomoxys calcitrans*****Stagmomantis carolina**

- Britton, Conn. B. 155, 10, 1907.
 Haseman, Mo. Hort. Soc., 1911, 265.

Stagmomantis limbata

- Hunter & Hinds, U. S. B. 51, 150, 1905.
 Hunter & Pierce, U. S. B. 114, 137, 1912.

Stalk borer, see *Papaipema nitela***Standard Lime and Sulphur Solution**

- U. S. D. A. Ins. & Fung. Bd., Ins. 6, p. 90, 1914.

Staphylinus maculosus

- Kirkland, Pr. Ent. Soc. Wash. VIII, 59, 1906.

Steel-blue grapevine flea-beetle, see *Haltica chalybea***Stegomyia calopus**

- Berry, Amer. Med. X, 452, 1905.
 Berry, Med. Record, Sept. 14, 1907, 421.
 Burgess, U. S. B. 60, 74, 1906.
 Carroll, Science, XXIII, 401, 1906.
 Carroll, Osler's Mod. Med., II, 745, '07.
 Chambliss, S. C. Clemson Coll. Ext. Work, II, 5, 11, 1906.
 Dietz, Ind. Ent. R. 5, 162, 1912.
 Doane, Ins. Disease, 94, 1910.
 Douglass, Ind. Ent. R. 2, 92, 1910.
 Edwards, St. Louis Med. Rev., LII, 219, 1905.
 Felt, N. Y. St. Mus. B. 129, 15, 1909.
 Felt, N. Y. St. Mus. B. 136, 20, 1912.
 Finlay, N. Orl. Med. Surg. Jr., LX, 17, 1907.
 Francis, Pub. Health R. XXII, 381, '07.
 Garman, U. S. B. 60, 16, 1906.
 Goldberger, Bull. 16, Publ. Health Mar. Hosp. Serv., 1907.
 Herrick, Household Ins. 66, 1914.
 Howard, Science, XXII, 526, 1905.
 Howard, Suppl. Health Repts., XVIII, No. 46, 1905.
 Howard, Osler's Mod. Med., I, 386, '07.
 Howard, U. S. B. 78, 17, 1909.
 Howard, U. S. B. 88, 13, 1910.
 Howard, U. S. F. B. 444, 5, 1911.
 Howard, U. S. F. B. 547, 3, 1913.
 Kohnke, Science, XXIII, 375, 1906.
 Kohnke, Lancet Clinic, LVIII, 707, '07.
 Lazenby, Or. Judd Farm., Feb. 3, 1906, 163.
 Ludlow, Med. Record, Jan. 26, 1906, 95.
 Ludlow, Bull. 4, Off Surg. Gen. War Dept., 1914.
 Mitchell, Mosq. Life, N. Y., 144, 1907.
 Pothier, N. Orl. Med. Surg. Jr., LVIII, 326, 1905.
 Rosenau, Bull. 15, Pub. Health Mar. Hosp. Serv., 103, 1906.
 Rosenau, Prevent. Med., 212, 1913.
 Sellards, Fla. R., 1905, 26.
 Symons, Md. B. 134, 217, 1909.
 White, Science, XXIII, 371, 1906.
 White, Amer. Jr. Med. Sci., 1913, 378.
 ——— Cal. St. Bd. Health 9, 8, 164, '14.

Stegomyia fasciata, see *S. calopus*

- Steiroxys borealis**
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 134.
- Stenopelmatus irregularis**
 Essig, Cal. Hort. B. II, 1-2, 24, 1913.
- Stenopogon picticornis**
 Ainslie, U. S. B. 85, 92, 1910.
 Wildermuth, U. S. D. A. B. 124, 26, '14.
- Stenoscelis brevis**
 Felt, N. Y. St. Mus. Mem. 8, 494, 1906.
- Stenosphenus notatus**
 Felt, N. Y. St. Mus. Mem. 8, 493, 1906.
- Stephanoderes hispidulus**
 Funk, Pa. Dept. Agr. B. 152, 217, 1907.
- Stephanoderes in cornstalks**
 Tucker, Can. Ent., 1911, 27.
- Sterictiphora lineata**
 Swenk, Nebr. Ent. B. 1, 88, 1913.
- Stethorus picipes**
 Ewing, Oreg. B. 121, 60, 1914.
 Quayle, Cal. B. 234, 511, 1912.
 Quayle, J. Ec. Ent. VI, 87, 1913.
- Stethorus punctum**
 Ewing, Oreg. B. 121, 60, 1914.
 McGregor, U. S. C., 150, 9, 1912.
 McGregor, U. S. C., 172, 16, 1913.
 McGregor, J. Ec. Ent. VII, 330, 1914.
 Worsham, Ga. B. 92, 140, 1910.
- Stethorus vagans**
 Essig, Cal. Hort. B. II, 1-2, 220, 1913.
- Stewart's solution**
 Whetzel, Pr. N. Y. Fr. Grow. Assoc., 9, Meet., 35, 1910.
- Stiboscopus brooksi**
 Brooks, W. Va. B. 100, 240, 1906.
- Stictiocephala festina**
 Morrell, S. W. Stockm., Oct. 9, '14, 10.
- Stictiocephala inermis**
 Felt, N. Y. St. Mus. Mem. 8, 687, 1906.
 Gossard, Ohio B. 233, 96, 1911.
 Hodgkiss, N. Y. St. Techn. B. 17, 108, 1910.
- Osborn, J. Ec. Ent. IV, 137, 1911.
 Slingerland & Crosby, Man. Fr. Ins. 161, 1914.
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 201.
- Stictomyia longicornis**
 Hunter, Pratt & Mitchell, U. S. B. 113, 39, 1912.
- Stictonotus isosomatus**
 Kelly, J. Ec. Ent. III, 202, 1910.
- Webster, U. S. C. 66, Rev. Ed., 4, 1908.
- Stiretrus anchorago**
 Chittenden, U. S. B. 66, 64, 1909.
 Quaintance, U. S. C. 102, 6, 1908.
- Stomoxys calcitrans**
 Bishopp, U. S. Y. B., 1912, 391.
 Bishopp, J. Ec. Ent. VI, 112, 1913.
 Bishopp, U. S. F. B. 540, 5, 1913.
 Brain, Ann. Ent. Soc. Am. V, 421, 1912.
 Brain, Ann. Ent. Soc. Am. VI, 197, 1913.
 Brues, J. Ec. Ent. VI, 459, 1913.
 Criddle, Ont. Ent. Soc. R. 43, 100, 1913.
 Dalrymple Amer. Vet. Rev. XLII, 422, 1913.
 Doane, Ins. & Disease, 44, 1910.
 Herms, Cal. Cult., XLI, 262, 1913.
 Herrick, Household Ins. 41, 1914.
 Hewitt, Trans. Roy. Soc. Can. VIII, Sept. 1914, 37.
 Howard, U. S. C. 71, Rev. 1, 1906.
 Howard, J. Ec. Ent. II, 305, 1909.
 Howard, U. S. F. B. 459, 5, 1911.
 Lipp, Farm & Dairy, Can. Aug. 8, '12, 11.
 Lochhead, Syn. Ec. Ent. 92, 1914.
 Mason, O. Farm., Mar. 14, 1914, p. 384.
 Matthews, Mich. Farm., June 21, 1913, 679.
 Miller, Tex. Stockm. Farm., Sept. 11, 1912, 3.
 O'Kane, Inj. Ins. 349, 1914.
 Ransom, U. S. B. An. I. R., 1908, 496.
 Ransom, U. S. B. An. I. B. 163, 1913, 8.
 Rosenau, Prevent. Med., 226, 1913.
 Rosenau & Brues, Psyche, 1912, 191.
 Surface Pa. D. A. Zoöl. III, 1, 16, 1913.
 Washburn, Minn. P. B. 22, 14, 1905.
 Washburn, Minn. R. 10, 147, 1905.
 Whitmarsh, Ohio B. 253, 110, 1912.
- Stomoxys calcitrans and anthrax**
 Mitzmain, Bull. 94, Pub. Health Hyg. Lab. 41, 1914.
- Stomoxys calcitrans and plague**
 Wayson, Pub. Health R. XXIX, 3390, 1914.
- Stomoxys calcitrans and poliomyelitis**
 Brues, J. Ec. Ent. VI, 101, 1913.
 Rosenau & Brues, Month. Bull. Mass. Bd. Health, VII, 314, 1912.
 Sawyer & Herms, J. Amer. Med. Assoc., LXI, 461, 1913.
 Tex. Bd. Health B., VII, 5, 47, 1913.

Stored grain insects

Dean, Kans. Agr. Educ. I, 4, 49, 1909.

Jeffs, Iowa Agric., Apr., 1905, 330.

Surface, Pa. D. A. Zoöl. I, 1, 56, 1911.

Stott's Fir Tree Oil Soap

——— U. S. D. A. Ins. & Fung. No. 34, 1913.

Straussia longipennis

Gibson, Ont. Ent. Soc. R. 36, 120, 1906.

Strawberry crown-borer, *see* *Tyloderma fragariae*Strawberry crown-girdler, *see* *Otiorhynchus ovatus*Strawberry crown moth, *see* *Sesia rutilans*Strawberry false-worm, *see* *Harpiphorus maculatus*Strawberry flea-beetle, *see* *Haltica ignita*

Strawberry insects

Chandler, Mo. Hort. Soc., 1909, 364.

Hartwell, Ill. Hort. Soc. f. 1907, 294.

Katkamier, Pr. West N. Y. Hort. Soc., 57, Meet., 185, 1912.

Lovett, Oreg. Bien. Crop Pest R. f. 1911-1912, 122.

Melander, Better Fr., Dec., 1912, 15.

Shaw, N. C. Dept. Agr. B. Aug., 1913, 21.

Smith, N. J. B. 225, 6, 1909.

Surface, Pa. D. A. Zoöl. I, 1, 57, 1911.

Surface, Pa. D. A. Zoöl. II, 5, 205, 1912.

Treherne, Can. Exp. Farms Ent. B. 8, 1914.

Strawberry leaf-beetle, *see* *Typophorus canellus*Strawberry leaf-chafer, *see* *Diplotaxis frondicola*Strawberry leaf roller, *see* *Ancylis comp-tana*Strawberry root-borer, *see* *Graphops nebulosus*Strawberry root-louse, *see* *Aphis forbesi*Strawberry sawfly, *see* *Harpiphorus maculatus*Strawberry thrips, *see* *Euthrips tritici*Strawberry weevil, *see* *Anthonomus signatus*Straw itch, *see* *Pediculoides*Striped blister beetle, *see* *Epicauta vittata*Striped cucumber beetle, *see* *Diabrotica vittata*Striped cutworm, *see* *Feltia subgothica*Striped flea-beetle, *see* *Phyllotreta vittata*Striped garden caterpillar, *see* *Mamestra legitima*Striped hickory caterpillar, *see* *Datana angusii*Striped turnip flea-beetle, *see* *Phyllotreta vittata*Striped willow leaf-beetle, *see* *Melasoma scripta*

Strongylogaster pinguis

Britton, Conn. R. 6, 306, 1907.

Sturmia inquinata

Lovett, Oreg. Bien. Crop Pest R. f. 1913-1914, 171.

Stylogaster biannulata

Sanderson, U. S. B. 57, 22, 1906.

Stylopidea picta

Hunter, Pratt & Mitchell, U. S. B. 113, 22, 1912.

Suck-fly, *see* *Dicyphus minimus*Sugar beets, *grasshoppers on*

Titus, U. S. B. 54, 85, 1905.

Sucking horse-louse, *see* *Haematopinus asini*

Sugar beet insects

Adams, Or. Judd Farm., May 21, 1910, 848.

Adams, Cal. Cult., XLI, 258, 1913.

Ball, Deseret Farm., May 5, 1906, 2.

Titus, Deseret Farm., Mar. 28, 1908, 3.

Sugar-beet leaf-beetle, *see* *Monoxia puncticollis*Sugar-beet webworm, *see* *Loxostege sticticalis*Sugar-beet wireworm, *see* *Limonius californicus*Sugar-cane beetle, *see* *Ligyris rugiceps*Sugar-cane borer, *see* *Diatraea saccharalis*

Sugar-cane insects

Holloway, La. Plant., Dec. 28, 1912, 431.

Holloway, U. S. C. 165, 1912.

Holloway, U. S. C. 171, 1913.

Van Dine, La. Plant., May 14, '10, 420.

Sugar-cane mealy-bug, *see* *Pseudococcus calceolariae*Sugar-maple borer, *see* *Plagionotus speciosus*

Sulfocide

Britton & Walden, Conn. R. 8, 841, '09.

Sulphate of nicotine

Smith, N. J. R., 1909, 373.

Sulphite of soda

Smith, N. J. R., 1904, 588, 1905.

Sulphur

- Blake, N. J. Hort. Soc., 1910, 139.
 Garman, Ky. B. 147, 17, 1910.
 Haldeman, Northw. Hort. Apr. 1909, 76.
 Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 13, 1907.
 O'Kane, Inj. Ins. 82, 1914.
 Parrott, Pr. N. Y. Fr. Grow. Assoc., 7th East Meet., 88, 1909.
 Smith, N. J. B. 213, 30, 1908.
 Stone & Fernald, Mass. B. 123, 12, 1908.
Sulphur arsenical spray
 Stewart, Ohio Hort. Soc., 1912, 102.
Sulphur-arsenical spray injury
 Stewart, Va. Hort. Soc. 17th R., 245, '13.
Sulphur-colored tortrix, see *Epagoge sulfureana*
Sulphur as culicide
 Francis, Pub. Health R. XXII, 346, '07.
Sulphur dioxide
 Howard, U. S. B. 88, 35, 1910.
 Marlatt, U. S. B. 60, 139, 1906.
 Whitmarsh, Ohio B. 253, 150, 1912.
Sulphur preparations
 Parrott, N. Y. Dept. Agr. B. 62, 1826, 1914.
Sulphur, Soluble
 Frazier, Better Fr., Mar. 1914, 28.
Sulphur sprays
 Hall, Parrott, Beach & Serrine, N. Y. St. B. 262, 1905.
 Jordan, N. Y. St. B. 260, 505, 1904.
Sulphur washes
 Parrott, N. Y. Fr. Grow. Assoc., 1905, 59.
 Parrott, N. Y. Fr. Grow. Assoc., 1909, 26, 88.
 Parrott, Beach & Serrine, N. Y. St. B. 262, 39, 1905.
Sulphuretted hydrogen
 Britton, Conn. R. 7, 275, 1908.
 Britton, J. Ec. Ent. I, 112, 1908.
Superparasitism
 Fiske, J. Ec. Ent. III, 88, 1910.
Surekill
 Jarvis, Conn. Storrs B. 54, 179, 1908.
 Smith, N. J. R., 1905, 615.
Sure kill poison fly paper
 ——— U. S. D. A. & Fung. Bd., Ins. 1, p. 16, 1914.
Sweet-potato flea-beetle, see *Chaetocnema confinis*

Sweet potato insects

- Smith, N. J. R., 1908, 342.
 Smith, N. J. B., 229, 1910.
Sweet-potato root-borer, see *Cylas formicarius*
Swift's Concentrated Sulphur-Lime
 Britton & Walden, Conn. R. 8, 841, 1909.
Symdobius oblongus
 Patch, Me. B. 182, 245, 1910.
Symmerista albifrons
 Felt, N. Y. St. Mus. Mem. 8, 519, 1906.
 Patch, Me. B. 162, 354, 1908.
Symphya agromyzae
 Greene, J. Agr. Res. I, 474, 1914.
Symphorobius angustus
 Essig, Pom. Jr. Ent. II, 143, 1910.
 Essig, Cal. Hort. B. II, 1-2, 151, 1913.
 Essig, Cal. Hort. B. III, 3, 134, 1914.
Sympiesis felti
 Felt, N. Y. R. 26, 68, 1911.
Sympiesis nigrofemora
 Quaintance, U. S. B. 68, 29, 1907.
Sympiesis sp.
 Herrick, N. Y. C. B. 311, 286, 1912.
Sympiesis sp. on Agromyza
 Phillips, J. Agr. Res. II, 27, 1914.
 Webster & Parks, J. Agr. Res. I, 82, '13.
Sympiesis uroplatae
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 18, 1906.
Symplectoptes cysticola
 Pearl, Surface & Curtis, Me. R. 27, App. Poultry, 144, 1911.
Synanthedon acerni
 Douglass, Ind. Ent. R. 2, 64, 1910.
Synanthedon pictipes
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 74, 1913.
 Douglass, Ind. Ent. R. 4, 45, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 453, 1906.
 Felt, N. Y. R. 23, 32, 1908.
 Forbes, Ill. B. 151, 496, 1911.
 Forbes, Ill. Ent. R. 26, 36, 1911.
 Girault, U. S. B. 68, 31, 1907.
 Gossard, Ohio B. 233, 126, 1911.
 Gossard, Ohio Hort. Soc., 1914, 108.
 Howard, U. S. R. Ent., 1905, 288.
 King, J. Ec. Ent. VII, 401, 1914.
 O'Kane, Inj. Ins. 240, 1914.
 Quaintance, U. S. Y. B., 1905, 335.
 Quaintance, Better Fr., June 1909, 16.
 Sanderson, Ins. Pests, 645, 1912.

- Slingerland & Crosby, Man. Fr. Ins. 276, 1914.
 Williams & Price, Ala. Poly. B. 156, 123, 1911.
- Synanthedon pyri**
 Hewitt & Hayhurst, Ark. B. 109, 443, 1911.
- Synchlora aerata**
 O'Kane, Inj. Ins. 327, 1914.
- Synchlora rubivora**
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 118, 1913.
- Synchroa punctata**
 Felt, N. Y. St. Mus. Mem. 8, 666, 1906.
 Harned, Pr. Columbus Hort. Soc., 1906, 108.
- Syneta albida**
 Brittain, Pr. Ent. Soc. B. C., 4, 17, 1914.
 Treherne, Ont. Ent. Soc. R. 43, 107, '13.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 160.
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 96.
- Syntomaspis druparum**
 Crosby, Ann. Ent. Soc. Am. I, 38, 1908.
 Gossard, Ohio B. 233, 105, 1911.
 Marlatt, J. Ec. Ent. V, 76, 1912.
 Sanders, Pr. Ent. Soc. Wash., X, 108, 1908.
 Surface, Pa. Dept. Agr. R. 17, 155, 1911.
 Surface, Pa. D. A. Zoöl. II, 6, 220, 1912.
- Syntomaspis lazulla**
 Webster, Pr. Ent. Soc. Wash. VII, 116, 1905.
- Syntomosphyrum esurus**
 Howard & Fiske, U. S. B. 91, 139, 144, 1911.
- Syntomosphyrum sp.**
 Chittenden, U. S. B. 82, 12, 1909.
- Syrphid (larva)**
 Gibson, Ont. Ent. Soc. R. 41, 15, 1911.
- Syrphidae, economic value**
 Metcalf, Ohio Biol. Surv. B. 1, 42, 1913.
- Syrphoctonus maculifrons**
 Burke, Pr. Ent. Soc. Wash. VII, 81, '05.
 Burke, U. S. C. 61, 7, 1905.
- Syrphus americana**
 Chittenden, Va. Truck Exp. Sta. B. 2, 24 1909.
 Essig, Pom. Jr. Ent. III, 612, 1911.
 Essig, Cal. Hort. B. I, 7, 291, 1912.
 Essig, Cal. Hort. B. II, 1-2, 247, 1913.
- Folsom, Ill. B. 134, 148, 1909.
 Herrick, J. Ec. Ent. IV, 222, 1911.
 Herrick & Hungate, N. Y. C. B. 300, 737, 1911.
 Parker, U. S. B. 111, 22, 1913.
 Webster & Phillips, U. S. B. 110, 130, 1912.
- Syrphus opinator**
 Davidson, U. S. D. A. B. 100, 37, 1914.
 Parker, U. S. B. 111, 22, 1913.
 Russell, U. S. D. A. B. 90, 10, 1914.
- Syrphus ribesii**
 Herrick, J. Ec. Ent. IV, 222, 1911.
 Herrick & Hungate, N. Y. C. B. 300, 737, 1911.
 Russell, U. S. D. A. B. 90, 10, 1914.
- Syrphus sp.**
 Patch, Me. B. 134, 217, 1906.
 Clarke, Cal. Hort. Comm. Bien. R. 1, 374, 1905.
 Isaac, Bug vs. Bug, 25, 1906.
 Sanborn, Okla. B. 100, 27, 1912.
 Smith, Nebr. Bd. Agr. R. f. 1908, 324.
- Systema blanda**
 Chittenden, Ins. Inj. Veg., 63, 1907.
 Cooley, Mont. R. 12, 259, 1906.
 Forbes, Ill. Ent. R. 23, 107, 1905.
 Garman, Ky. B. 125, 46, 1906.
 Gibson, Can. Exp. Farms Ent. C. 2, 9, 1913.
 Newell & Smith, U. S. B. 52, 71, 1905.
 Pettit, Mich. B. 233, 164, 1906.
 Pettit, Mich. B. 258, 275, 1910.
 Sanderson, Ins. Pests, 402, 1912.
 Sherman, N. C. Dept. Agr. B. 29, 6, 50, 1908.
 ——— U. S. Y. B., 1907, 544.
 ——— U. S. Y. B., 1908, 571.
 ——— U. S. Y. B., 1908, 577.
- Systema frontalis**
 Fletcher, Can. Exp. Farms B. 52, 41, '05.
 Fletcher, Ont. Ent. Soc. R. 36, 85, 1906.
 Gibson, Can. Exp. Farms Ent. C. 2, 9, 1913.
 Lochhead, Syn. Ec. Ent. 76, 1914.
 Johnson & Hammar, U. S. B. 89, 17, '10.
 Smith, N. J. R., 1909, 406.
- Systema hudsonias**
 Forbes, Ill. Ent. R. 23, 190, 1905.
 Patch, Me. B. 134, 214, 1906.
 Slingerland & Crosby, Man. Fr. Ins. 204, 1914.

Systema marginalis

- Felt, N. Y. St. Mus. Mem. 8, 515, 1906.
Gibson, Can. Exp. Farms Ent. C. 2, 9, 1913.

Systema taeniata

- Chittenden, Ins. Inj. Veg., 64, 1907.
Cooley, Mont. R. 12, 260, 1906.
O'Kane, Inj. Ins. 157, 1914.
Sanderson, Ins. Pests, 403, 1912.
Slingerland & Crosby, Man. Fr. Ins. 204, 1914.

Systoechus oreas

- Sanderson Ins. Pests, 106, 1912.

Tabanidae

- Brimley, Prog. Farm, June 6, 1907, 6.

Tabanus abdominalis

- Hine, La. B. 93, 41, 1907.

Tabanus acutus

- Hine, La. B. 93, 40, 1907.

Tabanus americanus

- Hine, La. Crop Pest Comm. C. 6, 37, '06.
Hine, La. B. 93, 42, 1907.

Tabanus annulatus

- Hine, La. B. 93, 43, 1907.

Tabanus atratus

- Bishopp, U. S. Y. B., 1912, 386.
Garman, Ky. B. 151, 182, 1910.
Hine, La. Crop Pest Comm. C. 6, 15, 36, 1906.
Hine, Tech. B. 12, pt. 2, U. S. Bur. Ent. 34, 1906.
Hine, La. B. 93, 44, 1907.
Popenoe, Kans. Farm., Aug. 9, 1906, 831.
Tucker, Kans. Farm., May 17, '06, 533.
Washburn, Minn. P. B. 22, 11, 1905.

Tabanus benedictus

- Hine, La. Crop Pest Comm. C. 6, 37, '06.
Hine, La. B. 93, 45, 1907.

Tabanus coffeatus

- Hine, La. B. 93, 46, 1907.

Tabanus costalis

- Bishopp, U. S. Y. B., 1912, 386.
Herms, Cal. Cult., XLI, 291, 1913.
Hine, La. Crop Pest Comm. C. 6, 39, '06.
Hine, La. B. 93, 46, 1907.

Tabanus cymatophorus

- Hine, La. B. 93, 47, 1907.

Tabanus exul

- Garman, Ky. B. 151, 181, 1910.
Hine, La. B. 93, 48, 1907.

Tabanus fronto

- Hine, La. B. 93, 48, 1907.

Tabanus fulvulus

- Hine, La. Crop Pest Comm. C. 6, 41, '06.
Hine, La. B. 93, 49, 1907.

Tabanus fuscicostus

- Hine, La. B. 93, 49, 1907.

Tabanus lasiophthalmus

- Hine, Tech. 12, pt. 2, U. S. Bur. Ent. 19, 1906.

Tabanus lineola

- Bishopp, U. S. Y. B., 1912, 386.
Felt, N. Y. R. 21, 103, 1906.
Felt, U. S. B. 60, 90, 1906.
Garman, Ky. B. 151, 191, 1910.
Hine, La. Crop Pest Comm. C. 6, 39, '06.
Hine, La. B. 93, 50, 1907.

Tabanus lugubris

- Hine, La. B. 93, 51, 1907.

Tabanus megerlei

- Hine, La. Crop Pest Comm. C. 6, 38, 1906.
Hine, La. B. 93, 51, 1907.

Tabanus melanocerus

- Hine, La. B. 93, 51, 1907.

Tabanus mexicanus

- Hine, La. B. 93, 52, 1907.

Tabanus molestus

- Hine, La. Crop Pest Comm. C. 6, 41, '06.
Hine, La. B. 93, 52, 1907.

Tabanus nigrovittatus

- Hine, La. B. 93, 53, 1907.

Tabanus opacus

- U. S. Y. B., 1906, 516.

Tabanus pumilus

- Hine, La. Crop Pest Comm. C. 6, 40, '06.
Hine, La. B. 93, 54, 1907.

Tabanus punctifer

- Herms, Cal. Cult., XLI, 291, 1913.

Tabanus quinque-vittatus

- Hine, La. Crop Pest Comm. C. 6, 39, '06.
Hine, La. B. 93, 55, 1907.

Tabanus sagax

- Hine, La. Crop Pest Comm. C. 6, 40, '06.
Hine, La. B. 93, 56, 1907.

Tabanus sp.

- Hine, La. B. 93, 11, 1907.

Tabanus sp. on cattle

- Kans. Farm., Apr. 12, 1906, 402.

Tabanus stygius

- Hine, Tech. B. 12, pt. 2, U. S. Bur. Ent. 28, 1906.

- Tabanus sulcifrons**
Garman, Ky. B. 151, 190, 1910.
Hine, La. Crop Pest Comm. C. 6, 37, '06.
Hine, Tech. B. 12, pt. 2, 22, 1906.
Hine, La. B. 93, 15, 56, 1907.
- Tabanus trimaculatus**
Hine, La. B. 93, 58, 1907.
- Tabanus venustus**
Hine, La. Crop Pest Comm. C. 6, 38, '06.
Hine, La. B. 93, 58, 1907.
- Tabanus vivax**
Hine, Tech. B. 12, pt. 2, U. S. Bur. Ent. 32, 1906.
- Tabanus wiedemanni**
Hine, La. B. 93, 59, 1907.
- Tachina clisiocampae**
Schoene, N. Y. St. B. 312, 47, 1909.
- Tachina japonica**
Howard & Fiske, U. S. B. 91, 227, 1911.
- Tachina larvarum**
Howard, U. S. Y. B., 1905, 132.
Howard & Fiske, U. S. B. 91, 225, 1911.
- Tachina mella**
Ainslie, U. S. B. 85, 89, 1910.
Essig, Cal. Hort. B. II, 1-2, 259, 1913.
Hitchings, Me. Ent. R. 3, 11, 1908.
Howard & Fiske, U. S. B. 91, 139, 145, 1911.
- Tachina militaris**
Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 375.
- Tachina rustica**
Chittenden, U. S. C. 105, 12, 908.
- Tachinid pupation**
Thompson, J. Ec. Ent. III, 283, 1910.
- Tachinophyto sp.**
Jenne, U. S. B. 80, 30, 1909.
- Tachypterellus quadrigibbus**
Pierce, U. S. B. 100, 76, 1912.
- Taeniocampa alia**
Hart, Ill. Ent. R. 26, 78, 1911.
- Taeniopoda picticornis**
Morrill, J. Ec. Ent. VI, 189, 1913.
Morrill, S. W. Stockm., May 16, 1913, 10.
- Taeniorhynchus**, *see* **Culex**
- Tak-a-nap**
Forbes, Ill. B. 107, 257, 1906.
Smith, N. J. R., 1905, 609.
- Talbott's Scaly Leg Remedy**
—— U. S. D. A. Ins. & Fung. Bd., Ins. 1, p. 17, 1914.
- Tanglefoot**
Garman, Ky. B. 147, 19, 1910.
Morris & Parker, Mont. C. 36, 254, '14.
- Tapinoma pruinosum**
Doten, Nev. B. 73 $\frac{1}{2}$, 44, 1910.
- Tar**
Garman, Ky. B. 147, 19, 1910.
- Target brand**
Fernald, Mass. B. 116, 17, 1907.
Jarvis, Conn. Storrs B. 54, 178, 1908.
Smith, N. J. R., 1905, 615.
Smith, N. J. R., 1906, 594.
Smith, Ga. Bd. Ent. B. 21, 214, 1906.
Worsham, Pr. Ga. Hort. Soc., 1908, 73.
- Tarnished plant-bug**, *see* **Lygus pratensis**
- Tarola**
—— U. S. D. A. Ins. & Fung. No. 81, 1913.
- Tarsonemus approximatus**
Quayle, Cal. B. 234, 503, 1912.
- Tarsonemus pallidus**
Britton, Conn. R. 12, 296, 1913.
- Tarsonemus waitei**
O'Kane, Inj. Ins. 331, 1914.
Quaintance, U. S. B. 97, 103, 1912.
Slingerland & Crosby, Man. Fr. Ins. 301, 1914.
- Taxonus nigrisoma**
Chittenden & Titus, U. S. B. 54, 40, '05.
Webster, J. Ec. Ent. I, 310, 1908.
- Tegrodera erosa**
Morrill, Ariz. Comm. Agr. & Hort. R. 6, 33, 1914.
- Telamona monticola**
Felt, N. Y. St. Mus. Mem. 8, 596, 1906.
- Telea polyphemus**
Cockle, Ont. Ent. Soc. R. 35, 86, 1905.
Felt, N. Y. St. Mus. Mem. 8, 526, 1906.
Gossard, Ohio B. 233, 120, 1911.
- Telenomus ashmeadi**
Morrill, U. S. B. 64, 10, 1907.
Morrill, U. S. B. 86, 62, 78, 1910.
- Telenomus graptae**
Burgess & Collins, U. S. Y. B., 1911, 460.
- Telenomus heliothidis**
Quaintance & Brues, U. S. B. 50, 119, 1905.
- Telenomus orgyiae**
Volck, Cal. B. 183, 204, 1907.
- Telenomus phalaenarum**
Britton, Conn. B. 182, 20, 1914.
Howard & Fiske, U. S. B. 91, 260, 1911.

- Telenomus quaintancei**
 Gahan, J. Ec. Ent. IV, 423, 1911.
 Quaintance, U. S. Y. B., 1905, 333.
- Telenomus sphingis**
 Russell, Pr. Ent. Soc. Wash. XV, 93, '13.
- Telephorus bilineatus**
 Quaintance, U. S. Y. B., 1907, 443.
- Temelucha macer**
 Chittenden & Marsh, U. S. B. 109, 31, 1912.
- Temperature and distribution**
 Sanderson, J. Ec. Ent. I, 245, 1908.
- Temperature and hibernation**
 Sanderson, J. Ec. Ent. I, 56, 1908.
- Temperature and Insects**
 Dean, J. Ec. Ent. IV, 142, 1911.
 Dean, J. Ec. Ent. VI, 40, 1913.
 Goodwin, J. Ec. Ent. VII, 313, 1914.
 Sanderson, J. Ec. Ent. III, 113, 1910.
 Sanderson, N. H. Sci. Contr. 4, 113, '10.
 Sanderson & Peairs, N. H. Tech. B. 7, 1913.
 Sherman, Prog. Farm., Dec. 21, 1912, 1333.
- Temperature apparatus**
 Cotton, J. Ec. Ent. III, 140, 1910.
- Tenebrio molitor**
 Dean, Kans. Agr. Educ. I, 4, 53, 1909.
 Dean, Kans. B. 189, 208, 1913.
 Dietz, Ind. Ent. R. 6, 94, 1914.
 Girault, Ill. B. 156, 82, 1912.
 Girault, Ill. Ent. R. 27, 71, 1912.
 Gossard, Ohio B. 233, 85, 1911.
 Herrick, Household Ins. 229, 1914.
 O'Kane, Inj. Ins. 369, 1914.
 Smith, N. J. B. 203, 30, 1907.
 Smith, N. C. B. 203, 11, 1909.
 Surface, Pa. D. A. Zoöl. III, 1, 20, 1913.
 Whitmarsh, Ohio B. 253, 146, 1912.
- Tenebrio obscurus**
 Dean, Kans. Agr. Educ. I, 4, 54, 1909.
 Dean, Kans. B. 189, 209, 1913.
 Felt, N. Y. St. Mus. B. 129, 38, 1909.
 Felt, N. Y. St. Mus. B. 136, 44, 1912.
 Girault, Ill. Ent. R. 27, 72, 1912.
 Gossard, Ohio B. 233, 85, 1911.
 Herrick, Household Ins. 227, 1914.
 Smith, N. C. B. 203, 10, 1909.
 Surface, Pa. D. A. Zoöl. III, 1, 20, 1913.
- Tenebrio tenebrioides**
 Felt, N. Y. St. Mus. Mem. 8, 493, 1906.
- Tenebrioides castanea**
 Felt, N. Y. St. Mus. Mem. 8, 492, 1906.
 Hammar, U. S. B. 115, 74, 1912.
- Tenebrioides corticalis**
 Felt, N. Y. St. Mus. Mem. 8, 492, 1906.
 Forbes, Ill. Ent. R. 23, 182, 1905.
 Hammar, U. S. B. 80, 110, 1910.
 Hammar, U. S. B. 115, 73, 1912.
 Quaintance, U. S. Y. B., 1907, 443.
- Tenebrioides laticollis**
 Quaintance, U. S. Y. B., 1907, 443.
- Tenebrioides sp. on codling moth**
 Caesar, Ont. Agr. Coll. B. 187, 24, 1911.
- Tenebrioides mauritanicus**
 Dean, Kans. B. 189, 205, 1913.
 Dean, Kans. Agr. Educ. I, 4, 52, 1909.
 Dietz, Ind. Ent. R. 6, 93, 1914.
 Felt, N. Y. St. Mus. B. 129, 39, 1909.
 Felt, N. Y. St. Mus. B. 136, 45, 1912.
 Gossard, Ohio B. 233, 85, 1911.
 Forbes, Ill. Ent. R. 23, 182, 1905.
 Herrick, Household Ins. 232, 1914.
 Newell, Tex. P. B., 1910.
 O'Kane, Inj. Ins. 364, 1914.
 Sanderson, Ins. Pests, 188, 1912.
 Smith, N. C. B. 203, 11, 1909.
 Surface, Pa. D. A. Zoöl. III, 1, 9, 1913.
 Swenk, Nebr. Ent. B. 1, 104, 1913.
 Tucker, La. R. f. 1912, 19.
- Tenodera sinensis**
 Smith, N. J. R. f. 1904, 558, 585, 1905.
 Smith, U. S. B., 52, 77, 1905.
 Smith, N. J. R., 1906, 530.
 Smith, N. J. R., 1907, 443.
 Smith, U. S. B. 67, 37, 1907.
 Smith, N. J. R., 1908, 333.
 Smith, N. J. R., 1909, 374.
 Smith, N. J. R., 1910, 358.
- Ten-spotted xanthonia**, *see* **Xanthonia decemnotata**
- Tent caterpillar**, *see* **Malacosoma americana**
- Tenuipalpus californicus**
 Quayle, Cal. B. 234, 497, 1912.
- Tephroclystis miserulata**, *see* **Eupithecia**
- Teras minuta**, *see* **Acleris**
- Teras vacciniivorana**
 Whitson, Sandsten, Haskins & Ramsey, Wis. B. 119, 44, 1905.
- Termes flavipes**
 Ainslie, U. S. C. 116, 7, 1910.
 Barre & Conradi, S. C. B. 141, 44, 1909.

Termes flavipes (*Cont'd*)

- Britton, Conn. R. 9, 373-374, 1910.
 Chittenden, Nut Grow., Mar. 1906, 140.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 80, 1913.
 Dietz, Ind. Ent. R. 5, 164, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 87, 1905.
 Felt, N. Y. St. Mus. B. 129, 29, 1909.
 Felt, N. Y. R. 24, 56, 1909.
 Felt, N. Y. St. Mus. B. 136, 34, 1912.
 Fernald, Mass. R. 25, II, 87, 1913.
 Gossard, Fla. B. 79, 312, 1905.
 Herrick, Household Ins. 364, 1914.
 Hunter, Pr. Ent. Soc. Wash. XIV, 63, 1912.
 Hunter, Pratt & Mitchell, U. S. B. 113, 25, 1912.
 Marlatt, U. S. C. 50, 2nd Ser. Rev. Ed., 1, 1908.
 Morrill, S. W. Stockm., Aug. 21, '14, 10.
 Newell, Tex. Stockm. Farm., Oct. 8, 1913, 1.
 Sanborn, Okla. R. 21, 29, 1912.
 Sanborn, Okla. B. 100, 57, 1912.
 Smith, N. J. B. 203, 38, 1907.
 Snyder, U. S. C. 134, 5, 1911.
 Symons, Md. B. 101, 192, 1905.
 Weiss, J. Ec. Ent. VI, 284, 1913.
 Whitmarsh, Ohio B. 253, 139, 1912.
 ——— U. S. Y. B., 1905, 636.
 ——— U. S. Y. B., 1908, 570, 578, 580.

Termes lucifugus

- Essig, Cal. Hort. B. II, 1-2, 28, 1913.
 Parker, J. Ec. Ent. IV, 422, 1911.

Termes spp.

- Ainslie, U. S. F. B. 634, 7, 1914.

Termites

- Hopkins, U. S. C. 128, 3, 1910.
 Newcomer, Cal. Cult., XLII, 603, 1914.
 Prizer, Cal. Cult., XXXIV, 603, 1910.
 Snyder, U. S. C. 156, 1912.

Termites in fruit trees

- Dean, Kans. Farm., Apr. 22, 1908, 515.

Termites in sugar

- Holloway, U. S. C. 171, 7, 1913.

Terrapin scale, see Eulecanium nigrofasciatum**Tessellated scale, see Eucalymnatus tessellatus****Tetracha virginica**

- Chittenden, U. S. C. 87, 11, 1907.

Tetralopha militella

- U. S. Y. B., 1907, 549.

Tetramorium caespitum

- Felt, N. Y. St. Mus. B. 129, 31, 1909.
 Felt, N. Y. St. Mus. B. 136, 36, 1912.
 Herrick, Household Ins. 176, 1914.
 Marlatt, U. S. C. 34, 2nd Ed., 3, 1907.
 Whitmarsh, Ohio B. 253, 121, 1912.

Tetraneura graminis

- Patch, Me. B. 181, 208, 1910.

Tetraneura ulmi

- Patch, Me. B. 181, 219, 1910.
 Tucker, Kans. Farm., July 19, '06, 748.

Tetraneura ulmisacculi

- Patch, Me. B. 181, 216, 1910.

Tetranychoides californicus

- Quayle, Cal. B. 234, 498, 1912.

Tetranychus bicolor

- Britton, Conn. R. 6, 306, 1907.
 Britton, Conn. R. 8, 770, 1909.
 ——— U. S. Y. B., 1906, 514.

Tetranychus bimaculatus

- Baldwin, Ind. Ent. R. 5, 152, 1912.
 Baldwin, Ind. Ent. R. 6, 39, 1914.
 Barre & Conradi, S. C. B. 141, 32, 1909.
 Bremner, Cal. Hort. Comm. Destr. Ins., 4, 1910.
 Brierley, Rur. N. Y. 1913, 125.
 Britton, Conn. R. 12, 296, 1913.
 Caesar, Ont. Agr. Coll. B. 198, 25, 1912.
 Caesar, Ont. Ent. Soc. R. 43, 79, 1913.
 Caesar, Ont. Dept. Agr., Fr. B. 222, 36, 1914.

- Chittenden, Ind. Inj. Veg., 91, 1907.

- Chittenden, U. S. C. 104, 1, 1909.

- Conradi, Tex. B. 89, 28, 1907.

- Cooley, Mont. B. 88, 86, 1912.

- Davis, J. Ec. Ent. III, 181, 186, 1910.

- Davis, Ill. Ent. R. 26, 124, 1911.

- Davis, Ill. Hort. Soc. f. 1910, 35, 1911.

- Eisenberg, Cal. Cult., XLII, 719, 1914.

- Essig, Cal. Hort. B. II, 1-2, 8, 1913.

- Fernald, Mass. Bd. Agr. R. 55, 387, '08.

- Forbes, Ill. Ent. R. 23, 224, 1905.

- Fowler, Cal. Fr. Grow., Mar. 11, 1905, 4.

- Gahan, Md. B. 119, 20, 1907.

- Gee, Prog. Farm., Mar. 15, 1913, 370.

- Howard, U. S. R. Ent., 1911, 16.

- Howard, U. S. R. Ent., 1912, 17.

- Jarvis, Ont. Ent. Soc. R. 36, 127, 1906.

- Kennedy, South. Cult., May 15, '13, 10.

- Lewis, Ga. Bd. Ent. B. 33, 92, 1910.

- McGregor, U. S. C. 150, 1, 1912.
 McGregor, U. S. C. 172, 1, 1913.
 McGregor, J. Ec. Ent. VII, 324, 1914.
 O'Kane, Inj. Ins. 207, 322, 1914.
 Parker, Pac. Rur. Press, LXXXIII, 285, 1912.
 Parker, U. S. B. 117, 9, 1913.
 Parker, U. S. C. 166, 1, 1913.
 Paulhamus, The Ranch, June 15, '12, 13.
 Quayle, Cal. B. 234, 500, 1912.
 Russell, J. Ec. Ent. I, 377, 1908.
 Sanborn, Okla. B. 100, 37, 1912.
 Sherman, Prog. Farm., July 4, 1914, 765.
 Slingerland & Crosby, Man. Fr. Ins. 208, 315, 1914.
 Smith, Prog. Farm., Aug. 20, '10, 669.
 Somes, Mo. Fr. Exp. Sta. Bien. R. 1913-1914, 13.
 Stabler, Cal. Cult., XXXVIII, 519, '12.
 Stahl, The Ranch, Aug. 1, 1913, 4.
 Trumble, Better Fr., Apr. 1912, 27.
 Watson, Fla. R., 1913, LXX.
 Weiss, N. J. R., 1912, 435.
 Weldon, Colo. B. 152, 9, 1909.
 Weldon, Colo. R. Bd. Hort. f. '09, 39.
 Weldon, Better Fr. Apr., 1910, 24.
 Weldon, Colo. B. 169, 12, 1910.
 Weldon, Colo. Fr. Grow., Apr.-May, 1910, 9.
 Weldon, Colo. Bd. Hort. R. f. 1909, 39, 1910.
 Weldon, J. Ec. Ent. III, 430, 1910.
 Wilson, J. Ec. Ent. IV, 337, 1911.
 Yothers, Fla. Grow., June 14, 1913, 13.
 ——— Fla. Grow., May 31, 1913, 9.
 ——— Pac. Rur. Press, LXXXV, 355, 1913.
 ——— U. S. Y. B., 1906, 514.
 ——— U. S. Y. B., 1907, 546.
 ——— U. S. Y. B., 1908, 570, 578.
- Tetranychus gloveri**
 Sherman, N. C. Dept. Agr. B., 29, 6, 26, 1908.
 Smith, Ga. Bd. Ent. B. 20, 170, 1906.
 Smith, N. C. R. 34, 35, 1911.
 Smith & Lewis, U. S. B. 60, 81, 1906.
 Titus, U. S. B. 54, 88, 1905.
 Titus, U. S. C. 65, 1, 1905.
 Worsham, J. Ec. Ent. II, 209, 1909.
 Worsham, Ga. B. 92, 135, 1910.
 ——— U. S. Y. B., 1905, 631.
 ——— U. S. Y. B., 1906, 509.
- Tetranychus modestus**
 Forbes, Ill. Ent. R. 23, 224, 1905.
- Tetranychus mytilaspidis**
 Bremner, Cal. Hort. Comm. Destr. Ins., 1910, 4.
 Essig, Cal. Hort. B. II, 1-2, 4, 9, 1913.
 Ewing, J. Ec. Ent. V, 414, 1912.
 Morrill, S. W. Stockm., May 2, 1913, 15.
 Neuls, Cal. Hort. B. II, 6, 557, 1913.
 Parker, U. S. C. 166, 3, 1913.
 Pease, Cal. Hort. Comm. C. Nov., '05, 9.
 Prizer, Cal. Hort. B. I, 5, 174, 1912.
 Quayle, Cal. B. 214, 485, 1911.
 Quayle, Cal. B. 234, 487, 1912.
 Watson, Fla. R. 1913, LXX.
- Tetranychus pilosus**
 Caesar, Ont. Ent. Soc. R. 44, 51, 1914.
- Tetranychus sexmaculatus**
 Ehrhorn, Cal. Hort. Comm. Bien. R. 1, 121, 1905.
 Prizer, Cal. Hort. B. I, 5, 174, 1912.
 Quayle, Cal. B. 214, 485, 1911.
 Quayle, Cal. B. 234, 492, 1912.
- Tetranychus sp.**
 Beal, N. Y. C. B. 320, 710, 1912.
 Clarke, Cal. Fr. Grow., May 6, '11, 4.
 Cooper, Cal. Hort. Comm. Ins. & Insect., 21, 1905.
 Day, Cal. Cult., XXV, 247, 1905.
 Fernald, Mass. Crop R. f. Oct. '07, 31.
 Gibson, Ont. Ent. Soc. R. 36, 116, 1906.
 Gossard, Ohio B. 233, 144, 1911.
 Kells, Haynes & Stabler, Pac. Rur. Press, LXXVII, 308, 1909.
 Kone, Tex. Agr. R. 3, 6, 1910.
 Kone, Tex. Comm. Agr. R. 3, 6, 1910.
 Melander, Better Fr., Mar. 1914, 32.
 Parker, Pac. Rur. Press, LXXXV, 399, 1913.
 Parrott, N. Y. Fr. Grow. Assoc., '10, 34.
 Quayle, J. Ec. Ent. VI, 85, 1913.
 Reed, Ga. Hort. Soc. f. 1914, 55.
 Smith, Smith & Ramsey, Cal. B. 231, 385, 1912.
 Stabler, Cal. Hort. B. II, 12, 777, 1913.
 Stabler, Cal. Fr. Grow., Aug. 23, '13, 9.
 Stabler, Pac. Rur. Press, LXXXVI, 177, 1913.
 Symons & Gahan, Md. Hort. Soc., 1904, 35, 1905.
 Volck, Cal. Fr. Grow., Apr. 3, 1909, 5.
 ——— Cal. Fr. Grow., Dec. 1, 1906, 3.

- C. Gentl., 1906, 762.
 ——— C. Gentl., 1908, 747.
 ——— U. S. Y. B., 1906, 517.
- Tetranychus spp.**
 Fernald, Mass. R. 17, 113, 1905.
 Fernald & Fernald, Mass. R. 17, 113, 1905.
 Morrill, Cal. Cult., XXXV, 364, 1910.
 Smith, N. C. B. 197, 31, 1908.
- Tetranychus telarius**
 Ewing, Oreg. Agr. Coll. Exp. Sta. B. 121, 1914.
 Ewing, Oreg. B. 121, 3, 1914.
 Morrill, S. W. Stockm., Apr. 19, 1913.
 ——— C. Gentl., 1910, 762.
- Tetrastichus asparagi**
 Fernald, Mass. R. 22, II, 73, 1910.
 Russell & Johnston, J. Ec. Ent. V, 429, 1912.
- Tetrastichus carinatus**
 Felt, N. Y. R. 28, 39, 1913.
- Tetrastichus hunteri**
 Hunter & Pierce, U. S. B. 114, 142, 1912.
 Pierce, U. S. B. 100, 52, 1912.
- Tetrastichus hylotomae**
 Schwarz, Pr. Ent. Soc. Wash., XI, 107, 1909.
- Tetrastichus microgastri**
 Chittenden, U. S. B. 54, 79, 1905.
 Chittenden, U. S. C. 60, 5, 1905.
- Tetrastichus sp.**
 Dean, U. S. B. 85, 55, 1911.
 Fernald, J. Ec. Ent. II, 278, 1909.
 Parrott, N. Y. Fr. Grow. Assoc., '10, 34.
 Ruggles, Minn. R. 15, 56, 1914.
- Tetrastichus xanthomelaenae**
 Britton, Conn. R. S. 821, 1909.
 Howard, J. Ec. Ent. I, 281, 1908.
 Howard & Fiske, U. S. B. 91, 40, 1911.
 Smith, N. J. R., 1908, 312.
 Smith, N. J. R., 1909, 411.
- Tetropium cinnamopterum**
 Felt, N. Y. St. Mus. Mem. 8, 669, 1906.
- Tetropium velutinum**
 Webb, U. S. Y. B., 1910, 344.
- Tettigidea lateralis**
 Metcalf, N. C. Dept. Agr. Sp. B., 46, '09.
 Morgan, U. S. Y. B., 1910, 292.
- Tettigonia bifida**
 Osborn, U. S. B. 108, 63, 1912.
- Tettigonia comes**
 Johnson, U. S. D. A. B. 19, 2, 1914.
- Tettix arenosus**
 Morgan, U. S. Y. B., 1910, 292.
- Texas fever**
 Banks, J. Ec. Ent. I, 213, 1908.
 Cary, Ala. Poly. B. 141, 1907.
 Cotton, Tenn. B. 94, 119, 1911.
 Dalrymple, La. B. 84, 1905.
 Dawson, Fla. Bd. Health, 24th R., 162, 1913.
 Dinwiddie, Ark. B. 101, 1908.
 Graybill, U. S. F. B. 498, 5, 1912.
 Lewis, Okla. B. 81, 1908.
 Mohler, U. S. F. B. 258, 8, 1906.
 Mohler, U. S. F. B. 569, 1914.
 Nighbert, S. C. C. 24, 3, 1914.
 Powers, S. C. C. 6, 5, 1912.
 Schroeder, U. S. B. An. I. R., '05, 49, 71.
See also *Margaropus annulatus* & Tick eradication.
- Textil oil**
 Smith, N. J. R., 1905, 614.
- Thalessa lunator**
 Baldwin, Ind. Ent. R. 6, 49, 1914.
 Douglass, Ind. Ent. R. 4, 105, 1912.
 Symons, Md. B. 101, 199, 1905.
- Thamnotettix geminatus**
 Osborn, U. S. B. 108, 96, 1912.
- Thanasimus dubius**
 Felt, N. Y. St. Mus. Mem. 8, 500, 1906.
 Fiske, Pr. Ent. Soc. Wash. IX, 25, 1907.
- Thanasimus nubilus**
 Felt, N. Y. St. Mus. Mem. 8, 693, 1906.
- Thaneroclerus girodi**
 Morgan, Pr. Ent. Soc. Wash. XV, 89, 1913.
- Thaneroclerus sanguineus**
 Felt, N. Y. St. Mus. Mem. 8, 503, 1906.
- Thecla melinus**, *see* *Uranotes*
- Thecodiplosis mosellana**
 Felt, J. Ec. Ent. V, 287, 1912.
- Thelia acuminata**
 Felt, N. Y. St. Mus. Mem. 8, 595, 1906.
- Thelia godingi**
 Felt, N. Y. St. Mus. Mem. 8, 596, 1906.
- Theobaldia incidens**, *see* *Culex*
- Theretra tersa**
 Forbes, Ill. Ent. R. 23, 167, 1905.
- Theridium placens**
 Davidson, U. S. D. A. B. 100, 36, 1914.
- Theronia fulvescens**
 Aldrich, J. Ec. Ent. V, 87, 1912.
 Howard & Fiske, U. S. B. 91, 137, 144, 236, 1911.

Theronia conotracheli

Quaintance & Jenne, U. S. B. 103, 147, 1912.

Johnson & Girault, U. S. C. 73, 6, 1906.

Thiodia signatana

Felt, N. Y. St. Mus. Mem. 8, 168, 1905.

Thistle butterfly, see Vanessa cardui**Thomasia populicola**

Essig, Cal. Hort. B. II, 1-2, 84, 1913.

Patch, Me. B. 213, 78, 1913.

Thompson's rose nicotine

——— U. S. D. A. Ins. & Fung. Bd., Ins. 3, p. 38, 1914.

——— U. S. D. A. Ins. & Fung. No. 55, 1912.

Thread scale, see Ischnaspis longirostris**Three-lined leaf-beetle, see Lema trilineata****Thricolepis inornata**

Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 197.

Thripoctenus russelli

Chittenden, U. S. Y. B., 1912, 323.

Russell, U. S. B. 118, 41, 1912.

Russell, Tech. B. Bur. Ent. 23, pt. II, 1912.

Thrips

Leib, Pac. Rur. Press, LXXIII, 309, '07.

Lewis, Ga. Bd. Ent. B. 33, 93, 1910.

Moulton, Pac. Rur. Press, LXIX, 247, 1905.

Moulton, Cal. Hort. Comm. C. Feb., 1906, 3.

Slingerland & Crosby, N. Y. C. B. 252, 345, 1908.

Thrips blossoms

Cal. Fr. Grow., Mar. 4, 1905, 3.

Thrips in corn

Forbes, Ill. Ent. R. 23, 135, 1905.

Thrips in greenhouses

Fernald, Mass. Crop R. f. Oct. '07, 30.

Fernald, Mass. Bd. Agr. R. 55, 385, '08.

Treherne, Pr. Ent. Soc. B. C., 4, 30, '14.

Thrips sexmaculata, see Scolothrips**Thrips striatus, see Anaphothrips****Thrips tabaci**

Baldwin, Ind. Ent. R. 5, 145, 1912.

Barre & Conradi, S. C. B. 141, 40, 1909.

Bourne, J. Ec. Ent. VII, 196, 1914.

Britton & Walden, Conn. R. 13, 233, '14.

Chittenden, Ins. Inj. Veg., 89, 1907.

Chittenden, U. S. Y. B., 1912, 319.

Conradi, Tex. B. 89, 30, 1907.

Davis, Ill. Ent. R. 26, 123, 137, 1911.

Davis, J. Ec. Ent. III, 182, 183, 1910.

Davis, Ill. Hort. Soc. f. 1910, 38, 1911.

Essig, Cal. Hort. B. II, 1-2, 37, 1913.

Garcia, N. Mex. B. 68, 23, 1908.

Gillette, Colo. R. 20, 25, 1907.

Hooker, U. S. B. 65, 12, 1907.

Lewis, Pr. Ga. Hort. Soc. f. 1912, 12.

Lovett, Oreg. Coll. B. 91, 27, 1913.

Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 20, 1906.

Moulton, Cal. Cult., XXV, 75, 1905.

Moulton, Pac. Rur. Press, LXX, 100, 1905.

Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 98, 1909.

O'Kane, Inj. Ins. 204, 1913.

Pettit, Mich. B. 233, 188, 1906.

Rosenfeld, J. Ec. Ent. III, 214, 1910.

Russell, Wis. B. 240, 44, 1914.

Sanborn, Okla. B. 100, 40, 1912.

Sanderson, Ins. Pests, 418, 1912.

Shaw, U. S. D. A. B. 104, 2, 1914.

Slingerland, Herrick & Crosby, N. Y. C. B. 283, 473, 1910.

Smith, N. J. R., 1908, 329.

Swenk, Nebr. Ent. B. 1, 89, 1913.

Troop, Farm Guide, Feb. 17, 1912, 14.

Troop, Ind. Farm., Feb. 17, 1912, 19.

——— U. S. Y. B., 1906, 511.

——— U. S. Y. B., 1907, 546.

——— U. S. Y. B., 1908, 572.

Thrips tritici, see Euthrips**Thunderbolt beetle, see Arhopalus fulminans****Thyanta custator**

Forbes, Ill. Ent. R. 23, 196, 1905.

Hinds, U. S. B. 59, 29, 1906.

Morrill, U. S. B. 86, 84, 1910.

Sanderson, U. S. B. 57, 49, 1906.

Thyanta perditor

Forbes, Ill. Ent. R. 23, 117, 1905.

Thymaris slingerlandana

Burgess, Ohio Nurs. Orch. Insp. B. 5, 11, 1905.

Johnson & Hammar, U. S. B. 116, 48, 1912.

Thyreocoris pulicaria, see Corimelaena**Thyreus abbotti, see Sphecodina****Thyridopteryx ephemeraeformis**

Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 54.

Thyridopteryx ephemeraeformis (*Cont'd*)

- Britton, Conn. R. 7, 337, 1908.
 Burgess, U. S. B. 60, 74, 1906.
 Chittenden, Amer. Florist, Aug. 31, 1907, 325.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 36, 1906.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 24, 1913.
 Douglass, Ind. Ent. R. 1, 129, 1908.
 Douglass, Ind. Ent. R. 2, 61, 1910.
 Douglass, Ind. Ent. R. 3, 118, 1910.
 Douglass, Ind. Ent. R. 4, 114, 1912.
 Ehrhorn, Cal. Fr. Grow., Dec. 12, 1908, 13.
 Ehrhorn, Pac. Rur. Press, LXXVI, 388, 1908.
 Felt, N. Y. St. Mus. Mem. 8, 123, 1905.
 Felt, J. Ec. Ent. I, 276, 1908.
 Felt, N. Y. R. 24, 50, 1909.
 Felt, N. Y. R. 26, 54, 1911.
 Forbes, Ill. B. 151, 500, 1911.
 Forbes, Ill. Ent. R. 26, 38, 1911.
 Gahan, J. Ec. Ent. II, 236, 1909.
 Garman, Ky. B. 133, 46, 1908.
 Garman, J. Ec. Ent. V, 468, 1912.
 Glenn, Prai. Farm., May 1, 1913, 17.
 Gossard, Ohio B. 233, 110, 1911.
 Hadley, Rur. N. Y., 1913, 1223.
 Harris, Psyche, 1909, 65.
 Haseman, Mo. Hort. Soc., 1911, 234.
 Haseman, Mo. B. 104, 309, 1912.
 Headlee, Kans. Farm., Sept. 11, '09, 12.
 Headlee, Kans. Hort. Soc. 1909, 333.
 Houser, Ohio B. 194, 186, 1908.
 Howard, Nebr. Hort. Soc., 1912, 207.
 Howard & Chittenden, U. S. C. 97, 1, 1908.
 Morgan, Tenn. Bd. Ent. R. f. 1910, 54.
 Murtfeldt, Col. Rur. World, Feb. 22, 1911, 58.
 O'Kane, Inj. Ins. 307, 1914.
 Osborn, U. S. B. 52, 50, 1905.
 Osborn, O. Farm., July 21, 1906, 35.
 Rumsey & Brooks, W. Va. R. f. 1907-1908, 20.
 Rumsey & Brooks, W. Va. B. 116, 239, 1908.
 Smith, N. J. B. 181, 35, 1905.
 Smith, N. J. R., 1907, 418.
 Somes, Mo. Fr. Exp. Sta. Bien. R., 1913-1914, 17.
 Stedman, Mo. Hort. Soc., 1905, 283.
 Surface, Pa. D. A. Zoöl. I, 4, 154, 1911.
 Troop, Ind. Farm., Oct. 5, 1907, 2.
 Troop, Or. Judd Farm., Aug. 31, '07, 171.
 Webster, C. Gentl., Dec. 28, 1912, 7.
 Weiss, N. J. R., 1912, 428.
 Weiss & Patterson, N. J. C. 15, 9, 1912.
 Welden, J. Ec. Ent. I, 148, 1908.
 Welden, Md. Hort. Soc., 1907, 62, 1908.
 ——— C. Gentl., 1906, 185.
 ——— U. S. Y. B., 1907, 549, 550.
 ——— U. S. Y. B., 1908, 577.
Tibicen cruentifera
 Cooley, Mont. B. 88, 87, 1912.
Tibicen rimosa
 Patch, Me. B. 134, 222, 1906.
Tibicen rimosa var. noveboracensis
 Patch, Me. B. 134, 223, 1906.
Tibicen septemdecim
 Blines, Col. Rur. World, May 10, 1905, 145.
 Britton, Conn. R. 11, 296, 1912.
 Brues, Wis. R. 22, 325, 1905.
 Burgess, U. S. B. 54, 54, 1905.
 Burgess, Ohio Bd. Agr. R. 61, 658, 1906.
 Burgess, Ohio Nurs. Orch. Insp. R. 5, 18, 1907.
 Cotton, Ohio Nurs. Orch. Insp. B. 7, 31, 1906.
 Dean & Peairs, Kans. Agr. Educ. VI, 2, 14, 1913.
 Douglass, Ind. Ent. R. 4, 142, 227, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 231, 1905.
 Felt, N. Y. R. 22, 61, 1907.
 Felt, N. Y. R. 23, 48, 1908.
 Felt, N. Y. R. 27, 68, 1912.
 Felt, N. Y. R. 28, 111, 1913.
 Fernald, Mass. R. 25, 11, 86, 1913.
 Fisher, Pa. D. A. Zoöl. III, 12, 371, 7, 1906.
 Funk, Pa. Dept. Agr. B. 152, 215, 1907.
 Gahan & Weldon, U. S. B. 67, 38, 1907.
 Garman, Ky. B. 120, 74, 1905.
 Garman, Ky. B. 133, 60, 1908.
 Gossard, Ohio P. B. 334, 1912.
 Gossard, Ohio C. 142, 41, 1914.
 Hayhurst, Farm & Ranch, Apr. 29, 1911, 21.
 Marlatt, U. S. C. 74, 1, 1906.
 Marlatt, U. S. C. 89, 1, 1907.
 Marlatt, Pr. Ent. Soc. Wash. I X, 16, '07

- Marlatt, U. S. B. 71, 38, 1907.
 Marlatt, U. S. C. 132, 1, 1911.
 Morgan, Tenn. Bd. Ent. R. f. 1908, 19.
 O'Kane, Inj. Ins. 253, 1914.
 Phillips, South. Plant., Apr. 1910, 415.
 Rumsey, W. Va. Hort. Soc. 14th R., 30, 1907.
 Rumsey & Brooks, W. Va. R. f. 1905-1906, 21.
 Rumsey & Brooks, W. Va. R. f. 1907-1908, 21.
 Rumsey & Brooks, W. Va. B. 116, 239, 1908.
 Sanderson, Ins. Pests, 548, 1912.
 Sherman, Prog. Farm., June 25, '08, 15.
 Smith, N. J. R., 1906, 559.
 Smith, N. J. R., 1907, 424.
 Smith, U. S. B. 67, 34, 1907.
 Smith, N. J. R., 1910, 350.
 Smith, N. J. R., 1911, 454.
 Stedman, Mo. Hort. Soc., 1905, 55.
 Surface, Pa. D. A. Zoöl. III, 6, 174, '05.
 Surface, Pa. D. A. Zoöl. III, 12, 369, '06.
 Symons, Md. B. 101, 131, 1905.
 Troop, Ind. Bd. Agr. R. 55, 476, 1907.
 Webster, Iowa Home., June 27, 1912, 1293.
 Webster, J. Ec. Ent. V, 471, 1912.
 Webster, Prai. Farm., June 15, 1912, 8.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 148.
 ——— Pac. Rur. Press, LXXIII, 179, 195, 1907.
 ——— Prai. Farm., May 18, 1905, 3.
 ——— Rur. N. Y., 1910, 942.
 ——— U. S. B. Ent., unnumbered C., May 27, 1914.
- Tibicien septendecim var. cassinii**
 Smith, N. J. R., 1911, 457.
- Tibicen tredecim**
 Bentley, Tenn. Dept. Agr. Bien. R., 1909-1910, 41.
 Bentley, Tenn. R. f. 1911, 180.
 Bentley, Tenn. Bd. Ent. R. 7, 5, 1912.
 Marlatt, U. S. B. 71, 65, 1907.
 Morgan, Tenn. Bd. Ent. R. f. 1908, 19.
 Morgan, Tenn. Bd. Ent. R. f. 1910, 27.
- Tick eradication**
 Dalrymple, Amer. Vet. Rev. XL, 757, 1912.
 Ellenberger, Amer. Vet. Rev. XXXV, 651, 1909.
- Lenton, Ark. B. 101, 211, 1908.
 McDowell, Tenn. Dept. Agr. Bien. R., 1909-1910, 10.
 Parker, Tex. Stockm. Farm., Feb. 13, 1907, 3.
 Powers, S. C. Dept. Agr. R. 5, 126, 1909.
 Powers, S. C. Dept. Agr. R. 6, 121, 1910.
 Powers, S. C. Dept. Agr. R. 8, 54, 1912.
 Salmon, Amer. Vet. Rev. XXXVIII, 679, 1910.
 Vincenheller, Ark. B. 93, 19, 1907.
- Tick paralysis**
 Temple, Med. Sentinel, Sept. 1912.
 Todd, Can. Med. Assoc. Jr. II, 1118, 1912.
- Tick-resisting cattle**
 Herring, South. Cult., Jan. 15, 1911, 40.
 Herring, Amer. Vet. Rev. XXXVIII, 756, 1911.
- Tickicide**
 Mayo, Amer. Vet. Rev. XXX, 243, '06.
- Ticks**
 Barnard, St. Louis Med. Rev., LI, 437, 1905.
 Rosenau, Prevent. Med., 261, 1913.
- Ticks and angoras**
 McCarty, Farm & Ranch, Sept. 4, '09, 13.
- Ticks and disease**
 Doane, Ins. Disease, 26, 1910.
 Hooker, J. Ec. Ent. I, 65, 1906.
- Ticks, distribution**
 Hooker, J. Ec. Ent. II, 403, 1909.
- Ticks, Habits of**
 Hooker, J. Ec. Ent. I, 34, 1908.
- Ticks, Host relation of**
 Hooker, J. Ec. Ent. II, 251, 1909.
- Ticks injuring hides**
 Col. Rur. World, Aug. 14, 1913, 520.
- Tiger hickory borer, see Goes tigrina**
- Tile-horned prionus, see Prionus imbricornis**
- Timothy plant-bug, see Oncognathus binotatus**
- Tinea granella**
 Britton, Conn. R. 6, 305, 1907.
 O'Kane, Inj. Ins. 359, 1914.
 Pettit, Mich. B. 244, 205, 1907.
 Pettit, Mich. B. 258, 299, 1910.
 ——— U. S. Y. B., 1905, 630.
 ——— U. S. Y. B., 1906, 516.
 ——— U. S. Y. B., 1907, 552.

Tinea pellationella

- Dietz, Ind. Ent. R. 5, 178, 1912.
 Felt, N. Y. St. Mus. B. 129, 24, 1909.
 Felt, N. Y. St. Mus. B. 136, 29, 1912.
 Gossard, O. Farm., Mar. 20, 1909, p. 367.
 Herrick, Household Ins. 189, 1914.
 Kirkland, Me. Dept. Agr. Quart. B.,
 Vol. IV, 1, 11, 1905.
 Lochhead, Can. Ent., 1906, 68.
 Lochhead, Syn. Ec. Ent. 50, 1914.
 Marlatt, U. S. C., 36, 2nd Ed., 1, 1908.
 O'Kane, Inj. Ins. 355, 1914.
 Smith, N. J. B. 203, 15, 1907.
 Surface, Pa. D. A. Zool. III, 1, 18, 1913.
 Symons, Md. B. 101, 190, 1905.
 Washburn, Minn. R. 11, 68, 1906.
 Whitmarsh, Ohio B. 253, 119, 1912.

Tinea tapetzella, see Trichophaga**Tineola bisselliella**

- Douglass, Ind. Ent. R. 2, 67, 1910.
 Felt, N. Y. St. Mus. B. 129, 24, 1909.
 Felt, N. Y. St. Mus. B. 136, 29, 1912.
 Headlee, Kans. Agr. Educ. I, 3, 28,
 1909.
 Herrick, Household Ins. 194, 1914.
 Holmgren, Deseret Farm., May 11,
 1905, 7.
 Lochhead, Can. Ent., 1906, 68.
 Lochhead, Syn. Ec. Ent. 51, 1914.
 Marlatt, U. S. C. 36, 2nd Ed., 4, 1908.
 Reeder, N. Eng. Farm., July 15, '05, 7.
 Washburn, Minn. Ent. R. 13, 81, 1910.

Tiphia inornata

- Davis, U. S. F. B. 543, 14, 1913.
 Flint & Sanders, J. Ec. Ent. V, 490, 1912.
 Patch, Me. B. 162, 365, 1908.
 Wolcott, J. Ec. Ent. VII, 382, 1914.

Tiphia sp.

- Forbes, Ill. B. 116, 469, 1907.
 Forbes, Ill. Ent. R. 24, 157, 1908.

Tipula costalis

- Forbes, Ill. Ent. R. 23, 161, 1905.

Tipula infuscata

- Hyslop, U. S. B., 85, 119, 1910.
 ——— U. S. Y. B., 1908, 569.

Tipula simplex

- Carnes & Newcomer, Cal Hort. B. I, 7,
 275, 1912.
 Cook, Cal. Hort. B. I, 5, 195, 1912.
 Doane, Ent. News, 1908, 437.
 Essig, Cal. Hort. B. II, 1-2, 242, 1913.
 ——— U. S. Y. B., 1908, 570.

Tipula spp.

- Gossard, Ohio B. 233, 67, 1911.
 Sanderson, Ins. Pests, 121, 1912.

Tischeria malifoliella

- Baldwin, Ind. Ent. R. 5, 74, 1912.
 Felt, N. Y. R. 20, 404, 1905.
 Felt, N. Y. R. 28, 95, 1913.
 Gahan, Md. Hort. Soc., 1905, 79, 1906.
 Garman, Ky. B. 133, 16, 1908.
 Gossard, Ohio B. 233, 103, 1911.
 Houghton, Del. R. 16-17-18, 79, 1907.
 Houghton, Del. B. 87, 3, 1910.
 Jarvis, Conn. Storrs B. 45, 38, 1906.
 Lamson, Conn. Storrs B. 71, 79, 1912.
 Lochhead, Syn. Ec. Ent. 52, 1914.
 O'Kane, Inj. Ins. 309, 1914.
 Quaintance, Pr. Ent. Soc. Wash. VII,
 195, 1905.

- Quaintance, U. S. B. 68, 23, 1907.
 Sanderson, Ins. Pests, 616, 1912.
 Sherrington, Can. Hort. XXX, 26, 1907.
 Slingerland & Crosby, Man. Fr. Ins. 69,
 #1914.

- Stene, R. I. Bd. Agr. R. 25, 149, 1910.

- Stuart, Vt. R. 18, 313, 1905.

- Wilson, Oreg. Bien. Crop Pest R. f.
 1911-1912, 154.

- C. Gentl., 1906, 1163.

- U. S. Y. B., 1905, 633.

- U. S. Y. B., 1906, 512.

- U. S. Y. B., 1907, 547.

Tmetocera ocellana

- Bailey, Vt. Agr. R., 6, 41, 1914.
 Baldwin, Ind. Ent. R. 5, 69, 1912.
 Baldwin, Ind. Ent. R. 6, 39, 1914.
 Barre & Conradi, S. C. B. 141, 23, 1909.
 Beach, Iowa B. 127, 54, 1912.
 Bethune, Ont. Agr. Coll. B. 158, 10, '07.
 Brittain, Pr. Ent. Soc. B. C., 4, 14, 1914.
 Britton, Conn. Farm., May 21, 1910, 3.
 Britton, Conn. R. 9, 353, 1910.
 Buckley, Me. Dept. Agr. B., Vol. X, 3,
 1911.

- Caesar, Ont. Ent. Soc. R. 42, 29, 1912.

- Caesar, Ont. Ent. Soc. R. 43, 76, 1913.

- Caesar, Ont. Ent. Soc. R. 44, 51, 1914.

- Clinton & Britton, Conn. R. f. 1909,
 1910, 593.

- Cooley, Mont. B. 64, 41, 1906.

- Cooley, Mont. B. 71, 148, 1908.

- Cooley, Mont. B. 92, 59, 1912.

- Cooley & Swingle, Mont. C. 17, 137, '12.

- Crandall, Ill. Hort. Soc. f. 1911, 341.
 Dean & Pears, Kans. Agr. Educ. VI, 2, 50, 1913.
 Douglass, Ind. Ent. R. 3, 119, 1910.
 Ehrhorn, Pac. Rur. Press, LXXVI, 372, 1908.
 Ehrhorn, Cal. Fr. Grow., Dec. 12, '08, 12.
 Fernald, Mass. R. 25, II, 85, 1913.
 Fulton, Wright & Gregg, Pa. B. 110, 13, 1911.
 Gardner, Me. Comm. Agr. R. f. '11, 49.
 Gibson, Ont. Ent. Soc. R. 41, 13, 1911.
 Gossard, Ohio B. 164, 16, 1905.
 Gossard, Ohio B. 198, 39, 1908.
 Gossard, Ohio B. 233, 103, 1911.
 Gossard, Ohio Hort. Soc., 1914, 107.
 Herrick, Rur. N. Y., 1910, 193.
 Hewitt & Hayhurst, Ark. B. 109, 443, 1911.
 Hitchings, Me. Ent. R. 3, 97, 1908.
 Hitchings, Me. Comm. Agr. R., '07, 301.
 Jarvis, Conn. Storrs B. 56, 239, 1909.
 Johannsen & Patch, Me. Comm. Agr. R. f. 1910, 363.
 Johannsen & Patch, Me. B. 195, 241, 1911.
 Lamson, Conn. Storrs B. 71, 79, 1912.
 Lochhead, Ont. Agr. Coll. B. 144, 30, 1905.
 Lochhead, Ont. Ent. Soc. R. 40, 68, 1910.
 Lochhead, Ont. Ent. Soc. R. 43, 86, '13.
 Lochhead, Syn. Ec. Ent. 55, 1914.
 Melander, Better Fr., Apr. 1910, 31.
 Melander, Wash. B. 103, 43, 1911.
 Munson, Me. Dept. Agr. Quar. B., Vol. IV, 1, 15, 1905.
 O'Kane, Inj. Ins. 298, 1914.
 Parrott, N. Y. Dept. Agr. B. 50, 1747.
 Patch, Me. B. 134, 224, 1906.
 Quaintance & Scott, U. S. F. B. 492, 20, 1912.
 Sanderson, Ins. Pests, 621, 1912.
 Schoene & Fulton, N. Y. St. C. 25, 2, '13.
 Scott & Paine, U. S. D. A. B. 113, 1, '14.
 Slingerland & Crosby, N. Y. C. B. 252, 337, 1908.
 Slingerland & Crosby, Man. Fr. Ins. 42, 1914.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 467, 1910.
 Smith, N. J. R., 1911, 420.
 Stene, R. I. Bd. Agr. R. 25, 147, 1910.
 Surface, Pa. D. A. Zoöl. B. II, 10 & 11, 329, 1905.
 Surface, Pa. D. A. Zoöl. V, 12, 366, 1908.
 Surface, Pa. Dept. Agr. R. 16, 123, 1910.
 Surface, Pa. D. A. Zoöl. I, 1, 16, 1911.
 Swaine, Ont. Ent. Soc. R. 41, 92, 1911.
 Treherne, Pr. Ent. Soc. B. C., 4, 20, '14.
 Van Buren & Husted, N. Y. Dept. Agr. B. 24, 479, 1911.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 155.
 Wilson, Pr. Ent. Soc. B. C., 2, 6, 1912.
 Wilson & Moznette, Oreg. Bien. Crop Pest R. f. 1913-1914, 102.
 Mont. Bd. Hort. f. 1903-1904, 99, 1905.
 ——— U. S. Y. B., 1905, 632.
- Toads, *Insect food of***
 Surface, Pa. D. A. Zoöl. III, 3, 4, 134, 1913.
- Tobacco**
 Felt, N. Y. Fr. Grow. Assoc., 1910, 37.
 Garman, Ky. B. 147, 13, 1910.
 Gourley, Ohio Hort. Soc., 1909, 38.
 Jarvis, Conn. Storrs B. 56, 229, 1909.
 Melander, The Ranch, July 15, 1912, 13.
 Morris & Parker, Mont. C. 36, 253, '14.
 O'Kane, Inj. Ins. 83, 1914.
 Slingerland & Crosby, N. Y. C. B. 252, 347, 1908.
 Slingerland, Herrick & Crosby, N. Y. C. B. 283, 477, 1910.
 Smith, N. J. R., 1906, 585.
 Smith, Ga. Bd. Ent. B. 23, 12, 1907.
 Smith, N. J. B. 213, 28, 1908.
 Smith, N. J. R., 1909, 373.
- Tobacco bud worm, *see* Chloridea virescens**
- Tobacco decoction**
 Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 24, 1907.
 Jarvis, Conn. Storrs B. 56, 229, 1909.
 Pickett, Ill. Hort. Soc. f. 1907, 383.
- Tobacco dust**
 Marlatt, U. S. B. 60, 92, 1906.
 Mich. Sp. B. 51, 438, 1910.
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 2, p. 27, 1914.
- Tobacco extracts**
 Hollister, J. Ec. Ent. V, 263, 1912.
 Morris & Parker, Mont. C. 36, 248, 1914.
 Parrott, N. Y. Fr. Grow. Assoc., '13, 47.
- Tobacco false budworm, *see* Heliothis obsoleta**

- Tobacco flea-beetle**, *see* *Epitrix parvula*
- Tobacco insects**
 Britton, Conn. R. 6, 263, 1907.
 Mathewson, South. Plant., Mar. '10, 265.
 Morgan, U. S. Y. B., 1910, 281.
 Morgan, Tenn. B. 93, 1911.
 Morgan, South. Plant., Jan. 1914, 46.
 Sherman, N. C. Dept. Agr. Sp. B., 1909.
 Sherman, Prog. Farm., Oct. 25, 1913, 1113.
 Surface, Pa. D. A. Zoöl. I, 1, 58, 1911.
 Surface, Pa. D. A. Zoöl. II, 5, 209, 1912.
- Tobacco leaf-miner**, *see* *Phthorimaea operculella*
- Tobacco split-worm**, *see* *Phthorimaea operculella*
- Tobacco stalk-worm**, *see* *Crambus caliginosellus*
- Tobacco suck-fly**, *see* *Dicyphus minimus*
- Tobacco thrips**, *see* *Euthrips fuscus*
- Tobacco worm, northern**, *see* *Phlegethontius quinque maculata*
- Tobacco worm, southern**, *see* *Phlegethontius sexta*
- To-Bak-Ine Liquid**
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 3, p. 39, 1914.
- To-Bak-Ine Liquid Poison**
 ——— U. S. D. A. Ins. & Fung. No. 50, 1912.
- To-Bak-Ine Sheep Dip**
 ——— U. S. D. A. Ins. & Fung. Bd., Ins. 3, p. 40, 1914.
- Tolyte laricis**
 Felt, N. Y. St. Mus. Mem. 8, 680, 1906.
- Tolyte velleda**
 Britton, Conn. R. 12, 293, 1913.
 Johansen & Patch, Me. Comm. Agr. R. f. 1910, 385.
- Tomato fruit-worm**, *see* *Heliothis obsoleta*
- Tomato insects**
 Chittenden, Tracy's Tomato Culture, New York, 1907, 123.
 Clay, Tex. Agr. & Statis. R., 1905, 275.
 Paddock, Farm & Ranch, Sept. 20, 1913, 13.
 Stuckey, South. Cult., May 1, 1913, 30.
 Watson, Fla. B. 112, 1912.
 Watson, Fla. B. 125, 1914.
- Tomato psyllid**
 Johnson, Col. Rur. World, Aug. 16, 1911, 258.
- Tomato worm**, *see* *Phlegethontius sexta*
- Tomicus balsameus**
 Felt, N. Y. St. Mus. Mem. 8, 375, 1906.
 Walker, Ent. Soc. Ont. R. 42, 60, 1912.
- Tomicus cacographus**
 Felt, N. Y. St. Mus. Mem. 8, 356, 1906.
- Tomicus caelatus**
 Felt, N. Y. St. Mus. Mem. 8, 354, 1906.
 Swaine, Ont. Ent. Soc. R. 43, 89, 1913.
 Walker, Ont. Ent. Soc. R. 42, 60, 1912.
- Tomicus calligraphus**
 Felt, N. Y. St. Mus. Mem. 8, 345, 1906.
 Swaine, Ont. Ent. Soc. R. 43, 90, 1913.
- Tomicus decretus**
 Hopkins, Pr. Ent. Soc. Wash., X, 18, 1908.
- Tomicus emarginatus**
 Swaine, Can. Exp. Farms Ent. B. 7, 23, 1914.
- Tomicus grandicollis**
 Tucker, Kans. Farm., May 31, '06, 588.
- Tomicus integer**
 Swaine, Can. Exp. Farm Ent. B. 7, 23, 1914.
- Tomicus interpunctus**
 Swaine, Can. Exp. Farms Ent. B. 7, 23, 1914.
- Tomicus oregonis**
 Swaine, Can. Exp. Farms Ent. B. 7, 23, 1914.
- Tomicus perturbatus**
 Swaine, Ont. Ent. Soc. R. 43, 89, 1913.
- Tomicus pini**
 Felt, N. Y. St. Mus. Mem. 8, 351, 1906.
 Felt, N. Y. R. 28, 101, 1913.
 Walker, Ont. Ent. Soc. R. 42, 59, 1912.
- Tomicus quadriguttatus**
 Felt, N. Y. St. Mus. Mem. 8, 692, 1906.
 Forbes, Ill. Ent. R. 23, 181, 1905.
- Tomicus sanguinolentus**
 Felt, N. Y. St. Mus. Mem. 8, 691, 1906.
- Tomicus typographus**
 Hopkins, U. S. Y. B., 1907, 155.
- Tomocera californica**
 Essig, Cal. Hort. B. II, 1-2, 272, 1913.
 Isaac, Bug vs. Bug, 18, 1906.
 Quayle, Cal. B. 214, 459, 1911.
 Quayle, Cal. B. 223, 189, 1911.
 Quayle, J. Ec. Ent. IV, 512, 1911.
- Tomostethus bardus**
 Baldwin, Farm. Guide, Dec. 20, '13, 13.
 Baldwin, Ind. Ent. R. 6, 41, 1914.

- Britton, Conn. R. 4, 217, 1905.
- Tomostethus multicinctus**
 Sasseer, Pr. Ent. Soc. Wash. XIII, 107, 1911.
 Shaw, Ohio Bd. Agr. R. 65, 1910, 542.
- Toothed flea-beetle, see Chaetocnema denticulata**
- Tortrix albicomana**
 Felt, N. Y. St. Mus. Mem. 8, 532, 1906.
 Gibson, Ont. Ent. Soc. R. 36, 122, 1906.
- Tortrix citrana**
 Cook, Cal. Cult., XXXV, 4, 1910.
 Essig, Cal. Hort. B. II, 1-2, 175, 1913.
 Quayle, J. Ec. Ent. III, 401, 1910.
 Quayle, Cal. B. 214, 494, 1911.
 Quayle, Cal. Cult., XXXVI, 548, 1911.
- Tortrix fumiferana**
 Britton, Conn. R. 12, 291, 1913.
 Britton, Conn. R. 13, 251, 1914.
 Felt, N. Y. St. Mus. Mem. 8, 416, 1906.
 Felt, N. Y. R. 25, 102, 1910.
 Gibson, Can. For. Jr., Dec. 1909, 143.
 Gibson, Ont. Ent. Soc. R. 40, 13, 54, '10.
 Gibson, Ont. Ent. Soc. R. 41, 14, 1911.
 Gibson, Ont. Ent. Soc. R. 42, 13, 1912.
 Gibson, Ont. Ent. Soc. R. 43, 16, 1913.
 Hewitt, Can. For. Jr., Oct. 1910.
 Hewitt, Ont. Ent. Soc. R. 41, 29, 1911.
 Hewitt, Ont. Ent. Soc. R. 42, 26, 1912.
 Johannsen, Me. B. 207, 455, 1912.
 Johannsen, Me. B. 210, 13, 1913.
 Johannsen & Patch, Me. B. 195, 241, '11.
- Tortrix quercifolia**
 Felt, N. Y. St. Mus. Mem. 8, 532, 1906.
- Tortrix sulphureana, see Epagoge**
- Torymus flavicoxa**
 Johannsen, Me. B. 187, 8, 1911.
- Tough-on-Flies**
 ——— U. S. D. A. Ins. & Fung. Bd.,
 Ins. 1, p. 21, 1914.
- Toumeyella liriodendri**
 Britton, Conn. R. 12, 294, 1913.
 Sanders, J. Ec. Ent. II, 447, 1909.
- Toumeyella pini**
 Howard, U. S. R. Ent., 1907, 31.
- Toumeyella sp.**
 Green, Minn. Hort. Soc., 1906, 209.
- Toumeyella turgida**
 Howard, U. S. R. Ent., 1907, 31.
 Newell & Smith, U. S. B. 52, 72, 1905.
- Tomoxia bidentata**
 Felt, N. Y. St. Mus. Mem. 8, 441, 1906.
- Tomoxia lineella**
 Felt, N. Y. St. Mus. Mem. 8, 441, 1906.
- Toxoptera aurantiae**
 Essig, Pom. Jr. Ent. III, 601, 1911.
 Essig, Cal. Hort. B. I, 4, 131, 1912.
 Essig, Cal. Hort. B. II, 1-2, 86, 1913.
- Toxoptera graminum**
 Barre & Conradi, S. C. B. 141, 52, 1909.
 Bentley, Tenn. Bd. Ent. R. f. 1913, 27.
 Bethune, Ont. Agr. Coll. R. 33, 53, 1908.
 Burgess & Collins, U. S. Y. B., 1911, 457.
 Conradi, U. S. B. 60, 67, 1906.
 Conradi, Kans. Farm., June 13, '07, 707.
 Conradi, Tex. Stockm. Farm., Jan. 23, 1907, 2.
 Conradi, Tex. Stockm. Farm., Feb. 6, 1907, 1.
 Cooley, Mont. B. 98, 125, 1914.
 Dean, Kans. Agr. Educ. I, 4, 40, 1909.
 Derr, U. S. F. B. 443, 44, 1911.
 English, Okla. C. Inform. 8, 1908.
 Felt, C. Gentl., 1907, 504.
 Fletcher, Farm. Advocate, Can., 1907, 1825.
 Forbes, Ill. Ent. R. 23, 134, 1905.
 Gillette, Colo. P. B. 45, 1907.
 Gillette, Colo. R. 20, 24, 1907.
 Gillette, C. Gentl., 1908, 107.
 Haseman, Mo. Bd. Agr. 44, 286, 1912.
 Headlee, Kans. Farm., Dec. 12, 1907, 1353.
 Headlee, Kans. P. B. 159, 1908.
 Headlee, Kans. R. 21, XLIX, 1908.
 Hewitt, Can. Ent. 1913, 77.
 Howard, U. S. R. Ent., 1907, 24.
 Howard, U. S. R. Ent., 1908, 22.
 Howard, U. S. R. Ent., 1909, 27.
 Howard, U. S. R. Ent., 1910, 25.
 Howard, U. S. R. Ent., 1914, 10.
 Hunter, Kans. Farm., May 2, 1907, 553.
 Hunter, Kans. Bd. Agr. Quar. R., Vol. XXVII, 105, 35, 1908.
 Hunter, Kans. Farm., Apr. 2, 1908, 425.
 Luginbill, S. C. Dept. Agr. R. 10, 264, 1914.
 McAtee, U. S. Y. B., 1912, 397.
 Moore, Ann. Ent. Soc. Am. VII, 77, 1914.
 Nicholson, Okla. R. 17, 19, 57, 1908.
 O'Kane, Inj. Ins. 196, 1914.
 Phillips, Pr. Ent. Soc. Wash. X, 11, '08.
 Pettit, Mich. B. 258, 317, 1910.

Toxoptera graminum (*Cont'd*)

- Riddle-Smyth, Kans. Farm., May 16, '07.
 Sanborn, Tex. B. 89, 49, 1907.
 Sanderson, Ins. Pests, 150, 1912.
 Sherman, Prog. Farm., June 25, '08, 15.
 Smith, Nebr. Bd. Agr. R. f. 1908, 310.
 Smith, N. C. R. 34, 35, 1911.
 Tucker, Farm & Ranch, Aug. 24, '07, 6.
 Tucker, Kans. Farm., Dec. 5, 1907, 1316.
 Warburton, U. S. F. B. 436, 27, 1911.
 Washburn, Can. Ent. 1908, 53.
 Washburn, J. Ec. Ent. I, 358, 1908.
 Washburn, Minn. P. B. 32, 13, 1908.
 Washburn, Minn. R. 12, 42, 1908.
 Washburn, Minn. Ent. Sp. R. 1908.
 Webster, Pr. Ent. Soc. Wash. IX, 43, 1907.
 Webster, Kans. Farm., May 16, '07, 602.
 Webster, U. S. C. 85, 1, 1907.
 Webster, U. S. C. 93, 1, 1907.
 Webster, U. S. Y. B., 1907, 239.
 Webster, N. Mex. B. 68, 57, 1908.
 Webster, Pr. Ent. Soc. Wash. X, 111, 1908.
 Webster, U. S. Y. B., 1908, 372.
 Webster, Ann. Ent. Soc. Am. II, 67, '09.
 Webster, J. Ec. Ent. II, 210, 1909.
 Webster, U. S. C. 93, Rev. 1, 1909.
 Webster, J. Ec. Ent. VII, 403, 1914.
 Webster & Phillips, U. S. B. 110, 11, '12.
 ——— Kans. Farm., Apr. 9, 1908, 455.
 ——— U. S. Y. B., 1905, 629, 635.
 ——— U. S. Y. B., 1906, 510.
 ——— U. S. Y. B., 1907, 542.
 ——— U. S. Y. B., 1908, 568.

Toxoptera graminum and birds
 Coffee, Farm & Ranch, Apr. 13, '07, 3.**Toxoptera muhlenbergi**

- Phillips & Davis, Tech. B. 25, pt. 1, U. S. Bur. Ent., 1912.

Toxotrypana curvicauda

- Knab & Yothers, J. Agr. Res., II, 447, 1914.
 Marlatt, U. S. Fed. Hort. Bd. R. 8, '14.

Trachykele blondeli

- Burke, U. S. Y. B., 1909, 409.
 ——— U. S. Y. B., 1906, 515.

Trachykele lecontei

- Burke, U. S. Y. B., 1909, 408.

Trachykele opulenta

- Burke, U. S. Y. B., 1909, 409.
 ——— U. S. Y. B., 1906, 515.

Tragosoma harrisii

- Felt, N. Y. St. Mus. Mem. 8, 659, 1906.

Tree crickets, see Oecanthus spp.**Tree resistance to insect attack**

- Smith, N. J. Hort. Soc., 1908, 120.

Tree tanglefoot

- Smith, N. J. R., 1906, 606.

Tremex columba

- Baldwin, Farm. Guide, Jan. 3, 1914, 2.
 Baldwin, Ind. Ent. R. 6, 49, 1914.
 Douglass, Ind. Ent. R. 4, 105, 1912.
 Felt, N. Y. St. Mus. Mem. 8, 61, 1905.
 Gossard, Ohio B. 233, 115, 1911.
 Sanborn, Farm & Ranch, Jan. 11, '08, 11.
 Smith, N. J. R., 1906, 567.

Triangular flea-beetle, see Disonychia triangularis**Triaspis curculionis, see Sigalphus****Tribolium confusum**

- Chittenden & Pratt, U. S. B. 54, 69, '05.
 Dean, Kans. Agr. Educ. I, 4, 55, 1909.
 Dean, Kans. B. 189, 210, 1913.
 Dietz, Ind. Ent. R. 6, 90, 1914.
 Felt, N. Y. St. Mus. B. 129, 38, 1909.
 Felt, N. Y. St. Mus. B. 136, 44, 1912.
 Girault, Ill. B. 156, 77, 1912.
 Girault, Ill. Ent. R. 27, 66, 1912.
 Herrick, Household Ins. 248, 1914.
 Howard, U. S. B. 54, 80, 1905.
 O'Kane, Inj. Ins. 364, 1914.
 Parker, U. S. D. A. B. 15, 1, 1913.
 Smith, N. J. B., 203, 31, 1907.
 Surface, Pa. D. A. Zoöl. III, 1, 18, 1913.
 Whitmarsh, Ohio B. 253, 146, 1912.
 ——— U. S. Y. B., 1908, 579.

Tribolium ferrugineum

- Felt, N. Y. St. Mus. B. 129, 38, 1909.
 Felt, N. Y. St. Mus. B. 136, 44, 1912.
 Herrick, Household Ins. 251, 1914.
 Hinds, Ala. Poly. B. 170, 52, 1914.
 Surface, Pa. D. A. Zoöl. III, 1, 18, 1913.
 Tucker, Can. Ent., 1911, 27.
 ——— U. S. Y. B., 1908, 579.

Tribolium navale

- O'Kane, Inj. Ins. 364, 1914.
 Tucker, La. R. f. 1912, 19.

Trichiocampus viminalis

- Britton, Conn. R. 13, 256, 1914.
 Felt, N. Y. St. Mus. Mem. 8, 568, 1906.
 Felt, N. Y. R. 24, 13, 1909.

Trichiosoma tibialis

- Felt, N. Y. R. 28, 104, 1913.

- Triclistus pygmaeus**
Herrick, N. Y. C. B. 311, 291, 1912.
- Trichobaris compacta**
Pierce, U. S. B. 100, 79, 1912.
- Trichobaris texana**
Pierce, U. S. B. 73, 47, 1908.
Pierce, U. S. B. 100, 79, 1912.
- Trichobaris trinotata**
Army, Or. Judd Farm., Apr. 20, '12, 614.
Army, Am. Agric. May 4, 1912, 626.
Baldwin, Ind. Ent. R. 6, 43, 1914.
Bethune, Ont. Agr. Coll. B. 171, 33, '09.
Chittenden, Ins. Inj. Veg., 221, 1907.
Chittenden, U. S. B. 82, 88, 1911.
Conradi, Tex. B. 89, 36, 1907.
Dickens, Kans. B. 194, 488, 1914.
Fletcher, Can. Exp. Farms B. 52, 41, '05.
Lochhead & Jarvis, Ont. Agr. Coll. B. 150, 23, 1906.
Newell, La. Hort. Soc., 1908, 48.
Newell & Rosenfeld, La. Crop Pest Comm., C. 27, 103, 1909.
O'Kane, Inj. Ins. 135, 1914.
Pierce, U. S. B. 73, 47, 1908.
Pierce, U. S. B. 100, 79, 1912.
Sanborn, Okla. B. 100, 45, 1912.
Sanderson, Ins. Pests, 285, 1912.
Smith, N. C. B. 197, 51, 1908.
Smith, Nebr. Ins. Pest Bur. C. 8, 1, '08.
Swenk, Nebr. Bd. Agr. R. f. 1910, 368.
Symons, Md. B. 101, 174, 1905.
——— U. S. Y. B., 1908, 572.
- Trichocera regelationis**
Johannsen, Me. B. 177, 34, 1910.
Patch, Me. B. 148, 278, 1907.
- Trichochrous texanus**
Hunter, Pratt & Mitchell, U. S. B. 113, 32, 1912.
- Trichodectes parumpilosus**
Surface, Pa. D. A. Zoöl. III, 1, 13, 1913.
- Trichodectes scalaris**
Ransom, U. S. B. An. I. R., 1908, 500.
Surface, Pa. D. A. Zoöl. III, 1, 13, 1913.
- Trichogramma cerasarum**
Cotton, Ohio Nurs. Orch. Insp. B. 7, 32, 1906.
- Trichogramma minutum**
Holloway, La. Plant., Dec. 20, '13, 416.
Russell, Pr. Ent. Soc. Wash. XV, 93, 1913.
Wildermuth, U. S. D. A. B. 124, 19, 1914.
- Trichogramma odontotae**
Cotton, Ohio Nurs. Orch. Insp. B. 7, 18, 1906.
- Trichogramma pretiosa**
Ainslie, U. S. C. 116, 7, 1910.
Ainslie, U. S. F. B. 634, 7, 1914.
Garman & Jewett, Ky. B. 187, 578, 1914.
Girault, Psyche, 1906, 137.
Girault, Jr. N. Y. Ent. Soc. XV, 57, 116, 1907.
Howard & Fiske, U. S. B. 91, 143, 257, 1911.
Johnson & Hammar, U. S. B. 116, 28, 48, 1912.
Jones & Davidson, U. S. B. 115, 160, '13.
Morrill, Ariz. Comm. Agr. & Hort. R. 6, 40, 1914.
Quaintance, U. S. Y. B., 1907, 443.
Quaintance & Brues, U. S. B. 50, 115, 1906.
Reed, Ga. Bd. Ent. B. 29, 19, 1909.
Sanderson, Ins. Pests, 245, 1912.
Taylor, Colo. B. 119, 4, 1906.
Taylor, Colo. R. 19, 149, 1906.
——— Better Fr., Oct. 1910, 53.
- Trichogramma sp.**
Britton, Conn. B. 182, 20, 1914.
- Trichogramma sp. on brown-tail**
Tothill, Ont. Ent. Soc. R. 43, 58, 1913.
- Tricholyga grandis**
Howard & Fiske, U. S. B. 91, 229, 1911.
- Trichophaga tapetzella**
Felt, N. Y. St. Mus. B. 129, 24, 1909.
Felt, N. Y. St. Mus. B. 136, 29, 1912.
Herrick, Household Ins. 197, 1914.
Lochhead, Can. Ent., 1906, 68.
Lochhead, Syn. Ec. Ent. 51, 1914.
Marlatt, U. S. C. 36, 2nd Ed., 5, 1908.
- Trichopoda pennipes**
Chittenden, U. S. C. 39, 2nd Ed., 4, '08.
Morrill, U. S. B. 86, 92, 1910.
- Trichostibus parvula**
Watson, Fla. R., 1913, LXX.
- Trifidaphis radicola**
Essig, Cal. Hort. B. II, 1-2, 58, 1913.
- Trimerotropis citrina**
Metcalf, N. C. Dept. Agr. Sp. B. 59, '09.
- Trimerotropis vinculata**
Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 134.
- Trinoton lituratum**
Ewing, Oreg. Coll. B. 92, 12, 1913.

- Trinoton luridum**
Ewing, Oreg. Coll. B. 92, 10, 1913.
- Trioxa alacris**
Crawford, Cal. Hort. I, 3, 86, 1912.
- Trioxa obtusa**
Patch, Me. B. 187, 18, 1911.
- Trioxa tripunctata**
Felt, N. Y. St. Mus. Mem. 8, 688, 1906.
Slingerland & Crosby, Man. Fr. Ins. 322, 1914.
Smith, N. J. R., 1911, 416.
- Triphleps insidiosus**
Chittenden, U. S. Y. B., 1912, 322.
Ewing, Oreg. B. 121, 55, 1914.
Folsom, Ill. B. 134, 123, 1909.
Forbes, Ill. Ent. R. 23, 202, 1905.
Garman & Jewett, Ky. B. 187, 587, 1914.
Hooker, U. S. B. 65, 14, 1907.
McGregor, U. S. C. 150, 8, 1912.
McGregor, U. S. C. 172, 15, 1913.
McGregor, J. Ec. Ent. VII, 330, 1914.
Morrill, U. S. B. 86, 64, 1910.
Parker, U. S. B. 111, 23, 1913.
Quaintance & Brues, U. S. B. 50, 107, 1905.
Quayle, Cal. B. 234, 516, 1912.
Russell, U. S. B. 118, 42, 1912.
Webster, U. S. B. 69, 60, 1907.
Webster, U. S. C. 113, 11, 1909.
Webster, Iowa B. 111, 29, 1910.
- Triphleps sp. on Agromyza**
Webster & Parks, J. Agr. Res. I, 83, '13.
- Triphleps tristicolor**
Parker, U. S. B. 117, 19, 1913.
- Triphyllus humeralis**
Felt, N. Y. St. Mus. Mem. 8, 405, 1906.
- Trirhabda canadensis**
Britton, Conn. R. 8, 844, 1909.
- Trirhabda brevicollis**
Watson, Fla. R. 1913, LXV.
- Trissolcus euschisti**
Morrill, U. S. B. 86, 78, 1910.
- Trissolcus murgantiae**
Chittenden, U. S. C. 103, 6, 1908.
- Trissolcus podisi**
Quaintance, U. S. C. 103, 6, 1908.
- Tritoma thoracica**
Felt, N. Y. St. Mus. Mem. 8, 494, 1906.
- Tritoxa flexa**
Chittenden, Ins. Inj. Veg., 245, 1907.
Chittenden, U. S. Y. B., 1912, 329.
Smith, N. J. R., 1908, 355.
- Washburn, Minn. R. 11, 20, 1906.
——— U. S. Y. B., 1906, 511.
- Tritoxa incurva**
Chittenden, U. S. B. 64, 38, 1908.
- Trochilium fraxini**
Swenk, Nebr. Hort. Soc., 1909, 104.
- Troctes divinatoria**
Chittenden, Amer. Mill., Oct. 1, 1909, 783.
Cooley, Mont. B. 98, 123, 1914.
Felt, N. Y. St. Mus. B. 129, 28, 1909.
Felt, N. Y. St. Mus. B. 136, 33, 1912.
Herrick, Household Ins. 379, 1914.
Morgan, U. S. Y. B., 1910, 295.
Washburn, U. S. B., 60, 86, 1906.
- Troctes sp.**
Whitmarsh, Ohio B. 253, 132, 1912.
- Trogoderma tarsale**
Dean, Kans. B. 189, 230, 1913.
Houghton, J. Ec. Ent. I, 216, 1908.
Quaintance, U. S. Y. B., 1907, 443.
Woodsdalek, Ann. Ent. Soc. Am. V, 367, 1912.
- Trogosita sp. on Codling moth**
Caesar, Ont. Agr. Coll. B. 187, 25, 1911.
- Trogus exesorius**
Chittenden, U. S. B. 82, 23, 1909.
- Trogus exidianator**
Chittenden, U. S. B. 82, 23, 1909.
- Trombidium holosericeum**
Kaupp, Colo. B. 185, 10, 1912.
- Trombidium locustarum**
Jarvis, Can. Ent., 1906, 349.
Jarvis, Ent. Soc. Ont. R. 37, 111, 1907.
Patch, Me. B. 162, 366, 1908.
Sanderson, Ins. Pests, 105, 1912.
Webster, U. S. C. 84, 5, 1907.
Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 136.
- Trombidium scabrum**
Smith, N. J. R., 1908, 351.
Washburn, U. S. B. 67, 15, 1907.
- Trombidium sericium**
Smith, N. J. R., 1909, 381.
- Trombidium sp.**
Dietz, Ind. Ent. R. 5, 185, 1912.
Herrick, Household Ins. 317, 1914.
Hiden, Med. Summary, XXVII, 170, 1905.
Washburn, Minn. R. 14, 39, 1912.
- Tropea luna**
Felt, N. Y. St. Mus. Mem. 8, 526, 1906.

- Trypeta aequalis*
Popenoe, Kans. Farm., July 12, '06, 724.
- Trypeta canadensis*, *see* *Epochra*
- Trypeta ludens*, *see* *Anastrepha*
- Trypeta pomonella*, *see* *Rhagoletis*
- Trypodendron lineatus*
Swaine, Ont. Ent. Soc. R. 43, 89, 1913.
- Trypodendron retusum*
Swaine, Ont. Ent. Soc. R. 43, 89, 1913.
- Tryporemon latithorax*
Marlatt, U. S. Fed. Hort. Bd. R. 8, 1914.
- Tufted tent-caterpillar, *see* *Malacosoma constricta*
- Tulip soft scale, *see* *Eulecanium tulipifera*
- Turkey gnat, *see* *Simulium meridionale*
- Turkey pests
Gilbert, Mich. Farm., May 10, '13, 568.
- Turkeys and grasshoppers
Brunenkant, S. W. Stockm., Sept. 4, 1914, 3.
- Turnip louse, *see* *Aphis pseudobrassicæ*
- Turpentine borer, *see* *Buprestis apicans*
- Turtles, *insect food of*
Surface, Pa. D. A. Zoöl. VI, 4 & 5, 1908.
- Tussock moth, *see* *Hemerocampa*
- Twelve-spotted asparagus beetle, *see* *Crioceris duodecimpunctata*
- Twelve-spotted cucumber beetle, *see* *Diabrotica duodecimpunctata*
- Twig-borer, *see* *Polycæon confertus*
- Twig-girdler, *see* *Oncideres cingulata*
- Twig-pruner, *see* *Elaphidion villosum*
- Two-lined chestnut borer, *see* *Agrilus bilineatus*
- Two-spotted ladybird, *see* *Adalia bipunctata*
- Two-spotted mite, *see* *Tetranychus bimaculatus*
- Two-striped grasshopper, *see* *Melanoplus bivittatus*
- Two-striped leaf-beetle, *see* *Luperodes bivittatus*
- Two-striped locust, *see* *Melanoplus bivittatus*
- Two-striped sweet-potato beetle, *see* *Cassida bivittata*
- Two-striped walking-stick, *see* *Anisomorpha buprestoides*
- Tychea brevicornis*
Chittenden, Ins. Inj. Veg., 130, 1907.
O'Kane, Inj. Ins. 115, 1914.
Sanderson, Ins. Pests, 331, 1912.
- Titus, Deseret Farm., Mar. 28, 1908, 7.
—— U. S. Y. B., 1908, 571.
- Tychius sordidus*
Pierce, U. S. B. 100, 77, 1912.
- Tydeus coccophagus*
Ewing, Psyche, 1912, 128.
- Tyloderma foveolatum*
Pierce, U. S. B. 73, 47, 1908.
Pierce, U. S. B. 100, 78, 1912.
- Tyloderma fragariae*
Adams, Ark. B. 92, 15, 1907.
Baldwin, Ind. Ent. R. 5, 122, 1912.
Barre & Conradi, S. C. B. 141, 48, 1909.
Bremner, Cal. Hort. Comm. Destr. Ins., 1910, 14.
Chandler, Mo. B. 102, 263, 1912.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 121, 1913.
Gillette, Colo. B. 114, 27, 1906.
Gillette, Better Fr., Feb. 1910, 23.
Gossard, Ohio B. 233, 148, 1911.
Lochhead, Syn. Ec. Ent. 81, 1914.
O'Kane, Inj. Ins. 233, 1914.
Oskamp, Ind. B. 164, 763, 1913.
Price, Va. C. 7, 49, 1909.
Sanderson, Ins. Pests, 447, 1912.
Sherman, N. C. Dept. Agr. B. 34, 21, '13.
Slingerland & Crosby, Man. Fr. Ins. 388, 1914.
- Tylonota bimaculatus*
Swaine, Ont. Ent. Soc. R. 43, 88, 1913.
- Tymnes tricolor*
Felt, N. Y. St. Mus. Mem. 8, 515, 1906.
- Typhlocyba bifasciata*
Parrott, J. Ec. Ent. II, 79, 1909.
- Typhlocyba comes*
Alderman, Giddings & Rumsey, W. Va. C. 7, 35, 1913.
Baldwin, Ind. Ent. R. 5, 110, 1912.
Baldwin, Farm. Guide, Feb. 28, 1914, 17.
Dean & Peairs, Kans. Agr. Educ. VI, 2, 97, 1913.
Ehrhorn, Cal. Hort. Comm. Bien. R. 2, 229, 1907.
Essig, Ventura Co. (Cal.) Hort. Comm. B. 2, 1911.
Essig, Cal. Hort. B. II, 1-2, 42, 1913.
Gibson, Ont. Ent. Soc. R. 36, 114, 1906.
Gibson, Ont. Ent. Soc. R. 41, 16, 1911.
Gladwin, Rur. N. Y., 1913, 569.
Gossard, Ohio B. 233, 133, 1911.
Hartzell, N. Y. St. B. 331, 568, 1910.

***Typhlocyba comes* (Cont'd)**

- Hartzell, N. Y. St. B. 344, 30, 1912.
 Hartzell, Pr. N. Y. Fr. Grow. Assoc.,
 10 Meet., 153, 1911.
 Hartzell, Pr. N. Y. Fr. Grow. Assoc.,
 11 Meet., 88, 1912.
 Hartzell, N. Y. St. B. 359, 1913.
 Hartzell & Hall, N. Y. St. B. (Pop.
 Ed.) 359, 1913.
 Herrick, Rur. N. Y., 1911, 980.
 Howard, U. S. R. Ent., 1912, 26.
 Jarvis, Conn. Storrs B. 56, 254, 1909.
 Johannsen, Me. B. 177, 29, 1910.
 Johnson, U. S. B. 97, 1, 1911.
 Johnson, Pa. Dept. Agr. R. 17, 589,
 1911.
 Johnson, U. S. B. 116, 1, 1912.
 Lochhead, Syn. Ec. Ent., 47, 1914.
 Morrill, S. W. Stockm., May 29, 1914, 10.
 O'Kane, Inj. Ins. 311, 1914.
 Parrott, Pr. West. N. Y. Hort. Soc., 58
 Meet., 132, 1913.
 Quaintance & Shear, U. S. F. B. 284,
 19, 1907.
 Quayle, Cal. B. 198, 177, 1908.
 Quayle, J. Ec. Ent. I, 182, 1908.
 Quayle, Pac. Rur. Press, LXXXV, 400,
 1913.
 Quayle, Cal. Cult., XLII, 556, 1914.
 Quayle, Pac. Rur. Press, LXXXVII,
 522, 1914.
 Roberts, Cal. Fr. Grow., June 20, '14, 4.
 Sanderson, Ins. Pests, 520, 1912.
 Sill, Pa. Dept. Agr. B. 217, 51, 1912.
 Slingerland & Crosby, N. Y. C. B. 252,
 343, 1908.
 Slingerland & Crosby, Man. Fr. Ins.
 408, 1914.
 Slingerland, Herrick & Crosby, N. Y.
 C. B. 283, 472, 1910.
 Somes, Mo. Fr. Exp. Sta. Bien. R.,
 1913-1914, 14.
 Surface, Pa. D. A. Zoöl. V, 12, 383, '08.
 Surface, Pa. D. A. Zoöl. I, 4, 183, 1911.
 Symons, U. S. B. 60, 83, 1906.
 ——— Pac. Rur. Press, LXXXVII, 170,
 1914.
 ——— U. S. Y. B., 1906, 513.
 ——— U. S. Y. B., 1908, 576.

Typhlocyba comes* var. *octonotata

Hartzell, N. Y. St. B. 344, 35, 1912.

Typhlocyba mali*, see *Empoasca

Typhlocyba rosae

- Felt, N. Y. St. Mus. Mem. 8, 191, 1905.
 Felt, C. Gentl., 1909, 616.
 Felt, N. Y. R. 25, 90, 1910.
 Felt, J. Ec. Ent. IV, 413, 1911.
 Felt, N. Y. R. 27, 65, 1912.
 Gibson, Ont. Ent. Soc. R. 36, 114, 1906.
 Parrott, J. Ec. Ent. II, 79, 1909.
 Surface, Pa. D. A. Zoöl. VII, 2, 55, 1909.
 Treherne, Pr. Ent. Soc. B. C., 4, 32, '14.
 Wilson & Childs, Oreg. Bien. Crop
 Pest R. f. 1913-1914, 189.
 ——— C. Gentl., 1906, 944.
 ——— U. S. Y. B., 1906, 516.
 ——— U. S. Y. B., 1908, 578.

***Typhlocyba* sp.**

Gillette, Colo. B. 114, 23, 1906.

Typhlocyba tricineta

- Hartzell, N. Y. St. B. 344, 35, 1912.
 Johnson, U. S. D. A. B., 19, 10, 1914.

Typhlocyba vitifex

- Bethune, Ont. Agr. Coll. B. 158, 32, '07.
 Douglass, Ind. Ent. R. 3, 196, 1910.

Typhoea fumata

Caesar, Ont. Ent. Soc. R. 43, 83, 1913.

Typhoid fly*, see *Musca domestica***Typocerus velutinus***

- Felt, N. Y. St. Mus. Mem. 8, 436,
 1906.

Typophorus aterrimus

Gossard, Ohio B. 233, 150, 1911.

Typophorus canellus

- Baldwin, Ind. Ent. R. 5, 124, 1912.
 Britton, Conn. R. 4, 216, 1905.
 Felt, N. Y. St. Mus. Mem. 8, 537, 1906.
 Fulton, Wright & Gregg, Pa. B. 110, 38,
 1911.

Gossard, Ohio B. 233, 149, 1911.

Nicholson, Okla. B. 69, 17, 1905.

O'Kane, Inj. Ins. 263, 1914.

Sanderson, Ins. Pests, 448, 1912.

Slingerland & Crosby, Man. Fr. Ins.
 391, 1914.

Swenk, Nebr. Hort. Soc., 1909, 83.

——— U. S. Y. B., 1907, 552.

——— U. S. Y. B., 1908, 574.

Typophorus quadrinotatus

Dean & Pairs, Kans. Agr. Educ. VI,
 2, 125, 1913.

Smith, N. J. B. 225, 31, 1909.

Typophorus sexnotatus

Gossard, Ohio B. 233, 150, 1911.

Tyroglyphidae

Banks, Tech. B. 13, U. S. Bur. Ent., '06.

Tyroglyphus americanus

Chittenden & Marsh, U. S. B. 109, 32, 1912.

Quayle, Cal. B. 234, 502, 1912.

Tyroglyphus armipes

Burgess, U. S. B. 101, 70, 1912.

Tyroglyphus breviceps

Hunter & Pierce, U. S. B. 114, 137, 1912.

Pierce, U. S. B. 73, 30, 41, 1908.

Pierce, U. S. B. 100, 47, 1912.

Tucker, J. Ec. Ent. II, 377, 1909.

Tyroglyphus cocciphilus

Brooks, W. Va. B. 119, 339, 1909.

Marlatt, U. S. B. 71, 137, 1907.

Rumsey, W. Va. R. f. 1909-1910, 78.

Tyroglyphus lintneri

Ewing, Oreg. B. 121, 64, 1914.

Popenoc, U. S. C. 155, 4, 1912.

Tyroglyphus longior

Felt, C. Gentl., 1910, 1025.

Jarvis, Can. Ent., 1906, 240.

Surface, Pa. D. A. Zool. III, 1, 24, 1913.

Tyroglyphus malus

Quaintance & Sasseer, U. S. C. 121, 9, 1910.

Smith, Nebr. Hort. Soc. B. 20, 8, 1908.

Stene, R. I. Bd. Agr. R. 21, 44, 1906.

Tyroglyphus siro

Surface, Pa. D. A. Zool. III, 1, 24, 1913.

Tyroglyphus sp.

Popenoc, Kans. Farm., June 14, '06, 628.

Whitmarsh, Ohio B. 253, 147, 1912.

Tyroglyphus spp.

Herrick, Household Ins. 281, 1914.

Lochhead, Can. Ent., 1906, 69.

Two-spray calendar

Hungerford, J. Ec. Ent. VI, 165, 1913.

Ufeus plicatus

Cooley, Mont. B. 88, 86, 1912.

Uliota dubius

Felt, N. Y. St. Mus. Mem. 8, 490, 1906.

Ulus crassus

— Cal. Cult., XXIV, 365, 1905.

Universal insecticide and scale killer

Smith, N. J. R., 1904, 643, 1905.

Upis ceramboides

Felt, N. Y. St. Mus. Mem. 8, 497, 1906.

Uranotes melinus

Barre & Conradi, S. C. B. 141, 32, 1909.

Chittenden, Ins. Inj. Veg., 113, 1907.

Conradi, U. S. B. 60, 67, 1906.

Fields, Okla. R. 15, 53, 1905.

Hinds, U. S. B. 59, 29, 1909.

Howard, U. S. R. Ent., 1906, 6.

Hunter, U. S. F. B. 512, 40, 1912.

O'Kane, Inj. Ins. 213, 1914.

Sanderson, U. S. F. B. 223, 17, 1905.

Sanderson, U. S. B. 57, 40, 1906.

Sanderson, Ins. Pests, 248, 319, 1912.

Watson, Fla. R., 1913, LXX.

— U. S. Y. B., 1906, 509.

— U. S. Y. B., 1907, 542.

— U. S. Y. B., 1908, 567.

Urocerus abdominalis

Felt, N. Y. St. Mus. Mem. 8, 668, 1906.

Urocerus albicornis

Felt, N. Y. St. Mus. Mem. 8, 667, 1906.

Urogaster canarsiae

Johnson & Hammar, U. S. B. 116, 47, 1912.

Urogaster tischeriae

Quaintance, U. S. B. 68, 29, 1907.

Urographis fasciatus

Felt, N. Y. St. Mus. Mem. 8, 434, 1906.

Uropoda agitans

Newell, J. Ec. Ent., I, 263, 1908.

Uropoda provocans

Newell, J. Ec. Ent. I, 263, 1908.

Urosigalphus anthonomi

Hunter & Pierce, U. S. B. 114, 142, 1912.

Pierce, U. S. B. 73, 29, 38, 1908.

Urosigalphus armatus

Brooks, W. Va. B. 128, 181, 1910.

Brooks, W. Va. R. f. 1909-1910, 189.

Chittenden, U. S. C. 99, 6, 1908.

Urosigalphus robustus

Hunter & Hinds, U. S. B. 51, 146, 1905.

Urosigalphus schwarzi

Hunter & Pierce, U. S. B. 114, 142, 1912.

Pierce, U. S. B. 73, 29, 1908.

Urosigalphus sp. on boll weevil

Hunter & Pierce, U. S. B. 114, 142, 1912.

Pierce, U. S. B. 100, 53, 1912.

Vacuum oil

Smith, N. J. R., 1908, 364.

Smith, N. J. R., 1909, 368.

Vagabond crambus, see Crambus vulgigagellus

Valley grasshopper, see Oedaleonotus enigma

- Vanessa antiopa*, *see* *Euvanessa*
Vanessa atalanta
 Hitchings, Me. Comm. Agr. R., 1907, 215, 1908.
Vanessa californica
 Newcomer, Can. Ent., 1914, 67.
 Webster, Can. Ent., 1913, 117.
Vanessa cardui
 Britton, Conn. R. 5, 260, 1906.
 Washburn, U. S. B. 60, 85, 1906.
 Wilson, Oreg. Bien. Crop Pest R. f. 1913-1914, 131.
 Vaporizer moth, *see* *Hemerocampa*
 Vaporite
 Smith, N. J. R., 1907, 427.
 Variable oak borer, *see* *Phymatodes variabilis*
Varichaeta aldrichi
 Howard & Fiske, U. S. B. 91, 203, 1911.
 Varied anomala, *see* *Anomala varians*
 Variegated cutworm, *see* *Peridroma saucia*
Vedalia, *see* *Novius*
Vespa crabro
 Smith, N. J. R., 1909, 395.
 Smith, N. J. R., 1911, 429.
Vespa germanica
 Felt, N. Y. St. Mus. B. 129, 16, 1909.
 Felt, N. Y. Mus. B. 136, 23, 1912.
 Herrick, Household Ins. 325, 1914.
 Whitmarsh, Ohio B. 253, 137, 1912.
Vespa maculata
 Herrick, Household Ins. 325, 1914.
 Whitmarsh, Ohio B. 253, 137, 1912.
Vespamima sequoia
 Brunner, U. S. D. A. B. 111, 1, 1914.
 Viceroy butterfly, *see* *Basilarchia archippus*
 Victor Soluble Oil
 Britton & Walden, Conn. R. 8, 839, 1909.
 Jarvis, Conn. Storrs B. 54, 179, 1908.
 Vinegar fly, *see* *Drosophila ampelophila*
 Vine scale, *see* *Pulvinaria vitis*
 Violet aphid, *see* *Rhopalosiphum violae*
 Violet-tip butterfly, *see* *Polygonia interrogationis*
 Violet gall fly, *see* *Contarinia violicola*
Viviana sp.
 Forbes, Ill. B. 116, 475, 1907.
 Vreeland's Electro Insecticide soap
 Crosby & Leonard, N. Y. C. B. 346, 492, 1914.
 Walnut blister mite, *see* *Eriophyes tristriatus*
 Walnut fruit weevil, *see* *Conotrachelus juglandis*
 Walnut plant louse, *see* *Chromaphis juglandicola*
 Walnut scale, *see* *Aspidiotus juglans-regiae*
 Walnut sphinx, *see* *Cressonia juglandis*
 Walnut weevil, *see* *Cryptorhynchus parochus*
Walshia amorphella
 Chittenden, U. S. B. 64, 34, 1908.
 Marsh, U. S. F. B. 380, 15, 1909.
 Warble flies, *see* *Hypoderma*
 Warrior grasshopper, *see* *Camnula pel-lucida*
 Water-cress leaf beetle, *see* *Phaedon aeruginosa*
 Wavy ash sphinx, *see* *Ceratomia undulosa*
 Wavy-necked flea-beetle, *see* *Disonychia crenicollis*
 Waved sharpshooter, *see* *Oncometopia undata*
 Wavy spruce borer, *see* *Xylotrechus undulatus*
 Wavy-striped flea-beetle, *see* *Phyllotreta sinuata*
 Weather & insects
 Parrott, N. Y. Fr. Grow. Assoc., '10, 33.
 Webbing clothes moth, *see* *Tineola biselliella*
Websterellus tritici
 Webster, U. S. C., 66 Rev. Ed., 4, 1908.
 Weevil parasitism
 Pierce, J. Ec. Ent. III, 451, 1910.
 Well-marked cutworm, *see* *Noctua claudestina*
 Western armyworm, *see* *Euxoa agrestis*
 Western beet leaf-beetle, *see* *Monoxia consputa*
 Western cabbage flea-beetle, *see* *Phyllotreta albionica*
 Western cabbage flea-beetle, *see* *Phyllotreta pusilla*
 Western cedar bark-beetle, *see* *Phloeosinus punctatus*
 Western cedar bark-borer, *see* *Hylotrupes amethystinus*
 Western corn root-worm, *see* *Diabrotica longicornis*
 Western cricket, *see* *Anabrus simplex*

- Western five-spined tomicus, *see* *Tomicus confusus*
- Western flea-beetle, *see* *Phyllotreta pusilla*
- Western grain sawfly, *see* *Cephus occidentalis*
- Western hemlock bark-borer, *see* *Melanophila drummondii*
- Western hemlock wood-stainer, *see* *Gnathotrichus sulcatus*
- Western kermes, *see* *Kermes occidentalis*
- Western oak bark-beetle, *see* *Pityophthorus pubipennis*
- Western pine beetle, *see* *Dendroctonus brevicornis*
- Western pine hylurgops, *see* *Hylurgops subcostulatus*
- Western potato flea-beetle, *see* *Epitrix subcrinita*
- Western radish maggot, *see* *Phorbia planipalpis*
- Western striped cucumber beetle, *see* *Diabrotica trivittata*
- Western striped flea-beetle, *see* *Phyllotreta ramosa*
- Western 12-spotted cucumber beetle, *see* *Diabrotica soror*
- Western Indian peach scale, *see* *Aulacaspis pentagona*
- Whale oil soap
- Fernald, Mass. B. 125, 64, 1908.
- Jarvis, Conn. Storrs B. 56, 228, 1909.
- Morris & Parker, Mont. C. 36, 249, 1914.
- Pickett, Ill. Hort. Soc. f. 1907, 383.
- Smith, N. J. R., 1906, 605.
- Smith, N. J. B., 213, 25, 1908.
- Smith, Nebr. Bd. Agr. R. f. 1908, 310.
- Stone & Fernald, Mass. B. 123, 9, 1908.
- Van Buren & Husted, N. Y. Dept. Agr. B. 24, 484, 1911.
- Van Slyke & Urner, N. Y. St. B. 257, 430, 1904.
- U. S. D. A. Ins. & Fung. No. 156, 1913.
- U. S. D. A. Ins. & Fung. Bd., Ins. 2, p. 29, 1914.
- Wheat bulb-worm, *see* *Meromyza americana*
- Wheat-head army worm, *see* *Heliophila albilinea*
- Wheat insects
- Clay, Tex. Agr. & Statis. R., 1905, 275.
- Dean, Kans. Agr. Educ. I, 4, 30, 1909.
- Surface, Pa. D. A. Zoöl. I, 1, 60, 1911.
- Surface, Pa. D. A. Zoöl. II, 5, 211, 1912.
- Wheat joint-worm, *see* *Isosoma tritici*
- Wheat-midge, *see* *Contarinia tritici*
- Wheat sawfly, *see* *Dolerus* spp. and *Pachynematus*
- Wheat saw-fly borer, *see* *Cephus pygmaeus*
- Wheat-stem maggot, *see* *Meromyza americana*
- Wheat straw-worm, *see* *Isosoma grande*
- Wheat thrips, *see* *Thrips tritici*
- White-alder bark-beetle, *see* *Hylesinus aspericollis*
- White ant, *see* *Termes flavipes*
- White blister beetle, *see* *Macrobasis albida*
- White elm scale, *see* *Chionaspis americana*
- White fly, *see* *Aleyrodes citri*
- White grubs
- Gossard, O. Farm., May 28, 1910, p. 667.
- Gossard, Ohio B. 233, 59, 1911.
- Headlee, N. J. C. 26, 4, 1914.
- Herrick, Rur. N. Y., 1912, 1071.
- Hewitt, Farm & Dairy, Can., Sept. 18, 1913, 8.
- Mann, Prai. Farm., Sept. 15, 1912, 6.
- Sherman, N. C. Dept. Agr. B. 35, 5, 13, 1914.
- Slingerland, Rur. N. Y., 1907, 921.
- Slingerland, Herrick & Crosby, N. Y. C. B. 283, 75, 1910.
- Smith, N. J. R., 1906, 525.
- Smith, N. J. B., 225, 33, 1909.
- Swen, Nebr. Ent. B. 1, 86, 1913.
- Washburn, Minn. R. 14, 49, 1912.
- Rur. N. Y., 1906, 846.
- Rur. N. Y., 1913, 1079.
- White grubs, *see also* *Lachnosterna*
- White grubs and skunks
- Lutts, O. Farm., Jan. 8, 1910, p. 52.
- White hellebore
- Harcourt & Fulmer, Ont. Agr. Coll. B. 154, 24, 1907.
- Smith, N. J. R., 1906, 585.
- White-horned horntail, *see* *Urocerus albicornis*
- White-lined sphinx, *see* *Deilephila lineata*
- White-marked spider beetle, *see* *Ptinus fur*
- White-marked tussock-caterpillar, *see* *Hemerocampa leucostigma*
- White-pine sawyer, *see* *Monohammus scutellatus*

- White-pine weevil, *see* *Pissodes strobi*
- White sage mealy bug, *see* *Pseudococcus crawii*
- White Tar Moth Balls
 ——— U. S. D. A. Ins. & Fung. No. 147, 1914.
- Wild parsnip leaf-miner, *see* *Phytomyza albiceps*
- Wild walnut plant louse, *see* *Callipterus californicus*
- Willow insects
 Harned, Pr. Columbus Hort. Soc., 1906, 104.
- Willow scale, *see* *Chionaspis salicis-nigrae*
- Wilt disease, *see* *Porthetria dispar*, *disease of*
- Winthemia quadripustulata
 Britton, Conn. R. 12, 286, 1913.
 Cook, Cal. Hort. B. I, 7, 273, 1912.
 Garman, Ky. B. 137, 435, 1908.
 Quaintance & Brues, U. S. B. 50, 124, 1905.
 Sanderson, U. S. B. 57, 14, 1906.
 Sanderson, Ins. Pests, 117, 1912.
 Stedman, Mo. Bd. Agr. R. 38, 319, 1906.
 Walton, Pr. Ent. Soc. Wash. XV, 128, 1913.
 Webster, U. S. Y. B., 1907, 247.
 Webster, J. Ec. Ent. IV, 181, 1911.
- Wireworms
 Baldwin, Ind. Ent. R. 5, 132, 1912.
 Bethune, Farm & Dairy, Can., Mar. 11, 1909, 10.
 Bethune, Ont. Ent. Soc. R. 40, 65, 1910.
 Caesar, Farm Advocate, Can., 1910, 830.
 Conradi, Tex. Stockm. Farm., Apr. 11, 1906, 2.
 Felt, C. Gentl., 1908, 608.
 Fernald, Mass. C. 4, 1907.
 Fernald, J. Ec. Ent. II, 279, 1909.
 Fernald, Mass. R. 23, I, 78, 1911.
 Gilbert, Farm & Fireside, Nov. 15, 1906, 6.
 Gossard, Ohio B. 233, 58, 1911.
 Gossard, O. Farm. Mar. 11, '11, p. 316.
 Haseman, Mo. Bd. Agr. R. 44, 267, '12.
 Headlee, N. J. C. 26, 2, 1914.
 Helmick, Iowa Agric., May 1914, 461.
 Houser, O. Farm., Oct. 25, 1912, p. 386.
 Jarvis, Conn. Storrs B. 56, 251, 1909.
 Lillie, Mich. Farm., Apr. 15, 1911, v. 136, p. 434.
- Lochhead, Ont. Ent. Soc. R. 40, 71, '10.
 Lochhead, Syn. Ec. Ent. 71, 1914.
 Lovett, Oreg. Coll. B. 91, 7, 1913.
 Newell, La. Hort. Soc., 1908, 51.
 Newell, Farm & Ranch, June 13, 1914, 8.
 Newell & Rosenfeld, La. Crop Pest Comm. C. 27, 116, 1909.
 Ryther, N. Eng. Farm., Dec. 15, '06, p. 9.
 Sanborn, Okla. B. 100, 70, 1912.
 Sanderson, Ins. Pests, 81, 1912.
 Slingerland, Rur. N. Y., 1907, 589.
 Smith, N. C. B. 197, 31, 1908.
 Swenk, Nebr. Bd. Agr. R. f. 1909, 237.
 Williamson, Minn. R. 15, 69, 1914.
 Willing, Nor'-West Farm., July 5, 1911, 818.
 Wilson, Oreg. Bien. Crop Pest R. f. 1911-1912, 165.
 ——— C. Gentl., 1907, 421, 570.
 ——— U. S. Y. B., 1905, 630.
- Wireworms and robins
 Surface, Pa. Dept. Agr. B. 164, 115, '08.
- Wireworms in corn
 Dean, Kans. Agr. Educ. I, 4, 4, 1909.
 Fernald, J. Ec. Ent. IV, 282, 1911.
 Garman, Ky. B. 145, 294, 1909.
 Popenoe, Kans. Farm., June 13, '07, 705.
 Sherman, N. C. Dept. Agr. B. 26, 5, 7, 1905.
 Sherman, N. C. Dept. Agr. B. 35, 5, 10, 1914.
 Slingerland, Rur. N. Y., 1908, 617.
- Wireworms in potatoes
 Mich. Farm. Nov. 17, 1906, 377.
 ——— Pac. Rur. Press, LXXXVIII, 376, 1914.
- Wistaria stem gall-fly, *see* *Agromyza websteri*
- W-marked cutworm, *see* *Noctua clandestina*
- Wolf moth, *see* *Tinea granella*
- Wonder Fly Killer
 ——— U. S. D. A. Ins. & Fung. No. 42, 1913.
- Wood leopard moth, *see* *Zeuzera pyrina*
- Woodland spraying
 Worthley, J. Ec. Ent. IV, 188, 1911.
- Woolly apple aphid, *see* *Schizoneura lanigera*
- Xanthotype crocataria
 Hitchings, Me. Ent. R. 5, 5, 1910.

Xenopsylla cheopis

Banks, Pub. Health Mar. Hosp. Serv.
B. 30, 73, 1910.

Doane, Ins. Disease, 153, 1910.

Fox, Publ. Health Mar. Hosp. Serv. B.
30, 138, 1910.

Mitzmain, Ent. News, 1908, 354.

Mitzmain, Publ. Health Mar. Hosp.
Serv., B. 38, 1910.

Robinson, Amer. Jr. Pub. Health, IX,
775, 1913.

Xenopsylla cheopis, bites man

McCoy, Pub. Health R. XXIV, 189, '09.

Xestopsylla, see Sarcopsylla

Xiphidium brevipenne

Britton, Conn. R. 6, 274, 1907.

Smith, N. J. R., 1908, 342.

Xiphidium fasciatum

Britton, Conn. R. 6, 274, 1907.

Xiphidium sp. in corn

Forbes, Ill. Ent. R. 23, 147, 1905.

X-L mixture and San Jose Scale

Close, Del. B. 68, 1905.

Xyleborus celsus

Felt, N. Y. St. Mus. Mem. 8, 446, 1906.

Xyleborus dispar

Cordley, Better Fr., Aug. 1912, 11.

Gossard, Ohio B. 233, 116, 1911.

Gossard, Ohio B. 264, 65, 1913.

Gossard, Ohio C. 140, 12, 1914.

Johannsen, Me. B. 177, 41, 1910.

Johannsen, Me. B. 207, 363, 1912.

Johannsen & Patch, Me. Comm. Agr.
R. f. 1910, 328.

Johannsen & Patch, Me. B. 195, 235,
1911.

O'Kane, Inj. Ins. 249, 1914.

Slingerland & Crosby, Man. Fr. Ins. 232,
1914.

Swaine, Ont. Ent. Soc. R. 40, 58,
1910.

Wilson, Oreg. Bien. Crop Pest R. f.
1911-1912, 97.

Xyleborus pyri

Barre & Conradi, S. C. B. 141, 43, 1909.

Gossard, Ohio B. 264, 65, 1913.

Gossard, Ohio C. 140, 12, 1914.

Xyleborus saxeseni

Wilson, Oreg. Bien. Crop Pest R. f.
1911-1912, 107.

Xyleborus serratus

Swaine, Ont. Ent. Soc. R. 41, 92, 1911.

Xyleborus spp.

Hopkins, U. S. C. 126, 2, 1910.

Hopkins, U. S. C. 127, 2, 1910.

Xyleborus xylographus

Bremner, Can. Ent., 1907, 195.

Xylina antennata

Felt, N. Y. St. Mus. Mem. 8, 129, 1905.

Felt, C. Gentl., 1910, 646.

Felt, N. Y. R., 27, 48, 1912.

Hart, Ill. Ent. R. 26, 80, 1911.

Herrick, N. Y. Fr. Grow. Assoc., '13, 35.

Herrick, J. Ec. Ent. VII, 189, 1914.

O'Kane, Inj. Ins. 325, 1914.

Slingerland & Crosby, Man. Fr. Ins. 39,
1914.

—— U. S. Y. B., 1906, 512.

Xylina grotei

Slingerland & Crosby, Man. Fr. Ins. 39,
1914.

Xylina laticinerea

Bailey, Vt. Agr. R. 6, 40, 1914.

O'Kane, Inj. Ins. 326, 1914.

Slingerland & Crosby, Man. Fr. Ins.
39, 1914.

Xylina sp.

Cooley, Mont. B. 79, 52, 1910.

Cooley, Mont. B. 88, 86, 1912.

Cooley, Mont. B. 92, 59, 1912.

Cooley & Swingle, Mont. C. 17, 139, '12.

Xylina spp.

Baldwin, Ind. Ent. R. 5, 70, 1912.

Crandall, Ill. Hort. Soc. f. 1911, 339,
1912.

Gossard, Ohio B. 198, 47, 1908.

Lochhead, Ont. Agr. Coll. B. 144, 32,
1905.

Parrott, N. Y. Dept. Agr. B. 50, 1740.

Parrott, Pr. West. N. Y. Hort. Soc., 58
Meet., 128, 1913.

Schoene & Fulton, N. Y. St. C. 25, 4, '13.
Slingerland, Rur. N. Y., 1905, 471.

Xylocleptes sp.

Felt, N. Y. St. Mus. Mem. 8, 460, 1906.

Xylococcus quercus

Carnes, Cal. Hort. Comm. Bien. R. 2,
166, 1907.

Xylocopa virginica

Felt, N. Y. St. Mus. Mem. 8, 484, 1906.

Xylocrabro stirpicola

Gahan, J. Ec. Ent. IV, 431, 1911.

Xylophagus lugens

Felt, N. Y. R. 27, 121, 1912.

- Xylophruidea agrili*
Brooks, J. Agr. Res. III, 184, 1914.
- Xyloryctes satyrus*
——— U. S. Y. B., 1906, 516.
- Xyloterus bivittatus*
Felt, N. Y. St. Mus. Mem. 8, 369, 1906.
- Xyloterus politus*
Felt, N. Y. St. Mus. Mem. 8, 292, 1905.
- Xyloterus* spp.
Felt, N. Y. St. Mus. Mem. 8, 293, '05.
- Xylotrechus colonus*
Felt, N. Y. St. Mus. Mem. 8, 259, 1905.
Washburn, Minn. Ent. R. 13, 113, 1910.
- Xylotrechus sagittatus*
Felt, N. Y. St. Mus. Mem. 8, 663, 1906.
- Xylotrechus undulatus*
Felt, N. Y. St. Mus. Mem. 8, 671, 1906.
- Xyphidria albicornis*
Felt, N. Y. St. Mus. Mem. 8, 459, 1906.
- Xyphydria provancheri*
Felt, N. Y. St. Mus. Mem. 8, 465, 1906.
- Xystus brassicae*
Herrick, J. Ec. Ent. IV, 222, 1911.
Herrick & Hungate, N. Y. C. B. 300, 1911, 735.
- Yellow-bear caterpillar, *see* *Diacrisia virginica*
- Yellow butterfly, *see* *Eurymus philodice*
- Yellow fever mosquito, *see* *Stegomyia calopus*
- Yellowhead cranberry worm, *see* *Acleris minuta*
- Yellow meal-worm, *see* *Tenebrio molitor*
- Yellow-necked apple caterpillar, *see* *Datana ministra*
- Yellow scale, *see* *Chrysomphalus citrinus*
- Yponomeuta malinellus*
Bailey, Vt. Agr. R. 6, 35, 1914.
Parrott & Schoene, N. Y. St. Techn. B. 24, 1912.
- Yponomeuta padellus*
Bailey, Vt. Agr. R. 6, 35, 1914.
Parrott & Schoene, N. Y. St. Techn. B. 24, 1912.
- Yponomeuta* spp.
Parrott, J. Ec. Ent. VI, 63, 1913.
- Ypsolophus pometellus*
Baldwin, Ind. Ent. R. 5, 67, 1912.
Caesar, Ont. Ent. Soc. R. 42, 29, 1912.
Caesar, Ont. Ent. Soc. R. 43, 76, 1913.
Douglass, Ind. Ent. R. 3, 114, 1910.
- Felt, J. Ec. Ent. III, 341, 1910.
Felt, N. Y. R. 26, 35, 1911.
Felt, N. Y. R. 28, 96, 1913.
Herrick, J. Ec. Ent. VII, 191, 1914.
Lochhead, Syn. Ec. Ent. 51, 1914.
O'Kane, Inj. Ins. 278, 1914.
Slingerland & Crosby, Man. Fr. Ins. 52, 1914.
Schoene & Fulton, N. Y. St. C. 25, 6, '13.
- Zabrotes pectoralis*
——— U. S. Y. B., 1906, 510.
- Zagrammosoma multilineata*
Phillips, J. Agr. Res. II, 27, 1914.
Quaintance, U. S. B. 68, 29, 1907.
Webster & Parks, J. Agr. Res. I, 81, 1913.
- Zamia scale*, *see* *Diaspis zamiae*
- Zatropis catalpae*
Gossard, Ohio B. 197, 12, 1908.
- Zebra caterpillar*, *see* *Mamestra picta*
- Zelus renardii*
Morrill, U. S. B. 86, 65, 1910.
- Zenillia libatrix*
Howard & Fiske, U. S. B. 91, 302, 1911.
- Zenoleum*
Morris & Parker, Mont. C. 36, 250, '14.
——— U. S. D. A. Ins. & Fung. No. 5, 1912.
——— U. S. D. A. Ins. & Fung. No. 91, 1913.
- Zeuzera eucalypti*
Ehrhorn, Pac. Rur. Press, LXXVI, 404, 1908.
- Zeuzera macleayi*
Ehrhorn, Pac. Rur. Press, LXXVI, 404, 1908.
- Zeuzera pyrina*
Bailey, Vt. Agr. R. 5, 29, 1913.
Bailey, Vt. Agr. R. 6, 35, 1914.
Britton, Conn. R. 8, 847, 1909.
Britton, Conn. R. 9, 356, 1910.
Britton, J. Ec. Ent. III, 436, 1910.
Britton, J. Ec. Ent. IV, 298, 1911.
Britton, J. Ec. Ent. V, 241, 1912.
Britton & Cromie, Conn. R. 11, 317, '12.
Burgess, J. Ec. Ent. V, 174, 1912.
Cotton, Ohio Nurs. Orch. Insp. B. 7, 36, 1906.
Felt, N. Y. St. Mus. Mem. 8, 75, 1905.
Felt, C. Gentl., 1910, 922.
Felt, N. Y. R. 27, 88, 1912.
Fernald, Mass. R. 22, II, 72, 1910.

- Fernald, J. Ec. Ent. V, 246, 1912.
Fernald, Mass. R. 24, I, 82, 1912.
Fernald, Fernald & Summers, Mass. R. 20, 155, 1908.
Howard & Chittenden, U. S. C. 109, 1, 1909.
Reiff, Psyche, 1909, 28.
Smith, N. J. B. 181, 29, 1905.
Smith, N. J. R., 1908, 315.
Smith, N. J. Bd. Agr. R. 37, 188, 1910.
Smith, N. J. Ent. C. 30.
Stene, R. I. Bd. Agr. R. 25, 57, 1910.
Weiss, N. J. R., 1912, 437.
Weiss & Patterson, N. J. C. 15, 4, 1912.
——— C. Gentl., 1910, 396.
- Zeuzera sp.**
Douglass, Ind. Ent. R. 2, 62, 1910.
- Zinc arsenite**
Fernald, Mass. R. 25, I, 90, 1913.
Parrott, N. Y. Fr. Grow. Assoc., '13, 48.
Schoene, J. Ec. Ent. VI, 157, 1913.
Schoene, N. Y. St. Techn. B. 28, 3, 1913.
- Whitney, Pac. Rur. Press LXXXII, 130, 1911.
- Zophodia bella**
Gillette, Colo. B. 114, 25, 1906.
Gillette, Better Fr., Feb., 1910, 23.
- Zophodia grossulariae**
Gillette, U. S. B. 52, 59, 1905.
Gossard, Ohio. B. 164, 25, 1905.
Gossard, Ohio B. 198, 72, 1908.
Gossard, Ohio B. 233, 145, 1911.
O'Kane, Inj. Ins. 326, 1914.
Slingerland & Crosby, Man. Fr. Ins. 353, 1914.
Surface, Pa. D. A. Zoöl. III, 1, 12, 1913.
- Zygobaris xanthoxyli**
Pierce, U. S. B. 73, 47, 1908.
Pierce, U. S. B. 100, 80, 1912.
- Zygobothris nidicola**
Britton, Conn. B. 182, 20, 1914.
Howard, U. S. R. Ent., 1911, 9.
Howard & Fiske, U. S. B. 91, 161, 232, '262, 289, 1911.

